Pioneer sound.vision.soul

Service Manual

ORDER NO.
CRT2863

AV RECEIVER/DVD PLAYER WITH 7.0 INCH DISPLAY
AND DOLBY DIGITAL/DTS MULTI CHANNEL SURROUND

AVH-P7490DVD UC

COMPACT disc DIGITAL AUDIO · DVD VIDEO™ · DIGITAL dts® SURROUND

- This service manual should be used together with the manual(s) listed below.
  For the parts numbers, adjustments, etc. which are not shown in this manual, refer to the following manual(s).

Model No.	Order No.	Mech. Module	Remarks
AVX-P7300DVD/UC	CRT2672		7 Inch Wide AV System Display/DVD Player Section
AVM-P9000R/UC	CRT2518		Multi-Channel AV Master Unit Section
CX-954	CRT2670	MS2	DVD Mech. Module:Circuit Description, Mech.Description, Disassembly

EXPLODED VIEWS AND PARTS LIST

EXTERIOR(1/3)(AVX-P7300DVD/UC)(Page 6)

- **EXTERIOR SECTION PARTS LIST**

Mark	No.	Description	Part No.	
			AVX-P7300DVD/UC	AVH-P7490DVD/UC
	55	Remote Control Unit	CXB7969	Not used
	56	Cover	CZN5357	Not used

EXTERIOR(AVM-P9000R/UC)(Page 6)

- **EXTERIOR SECTION PARTS LIST**

Mark	No.	Description	Part No.	
			AVM-P9000R/UC	AVH-P7490DVD/UC
	74	Remote Control Assy	CXB6029	CXB9291
	75	Cover	CZN5357	CZN5434(Battery Cover)

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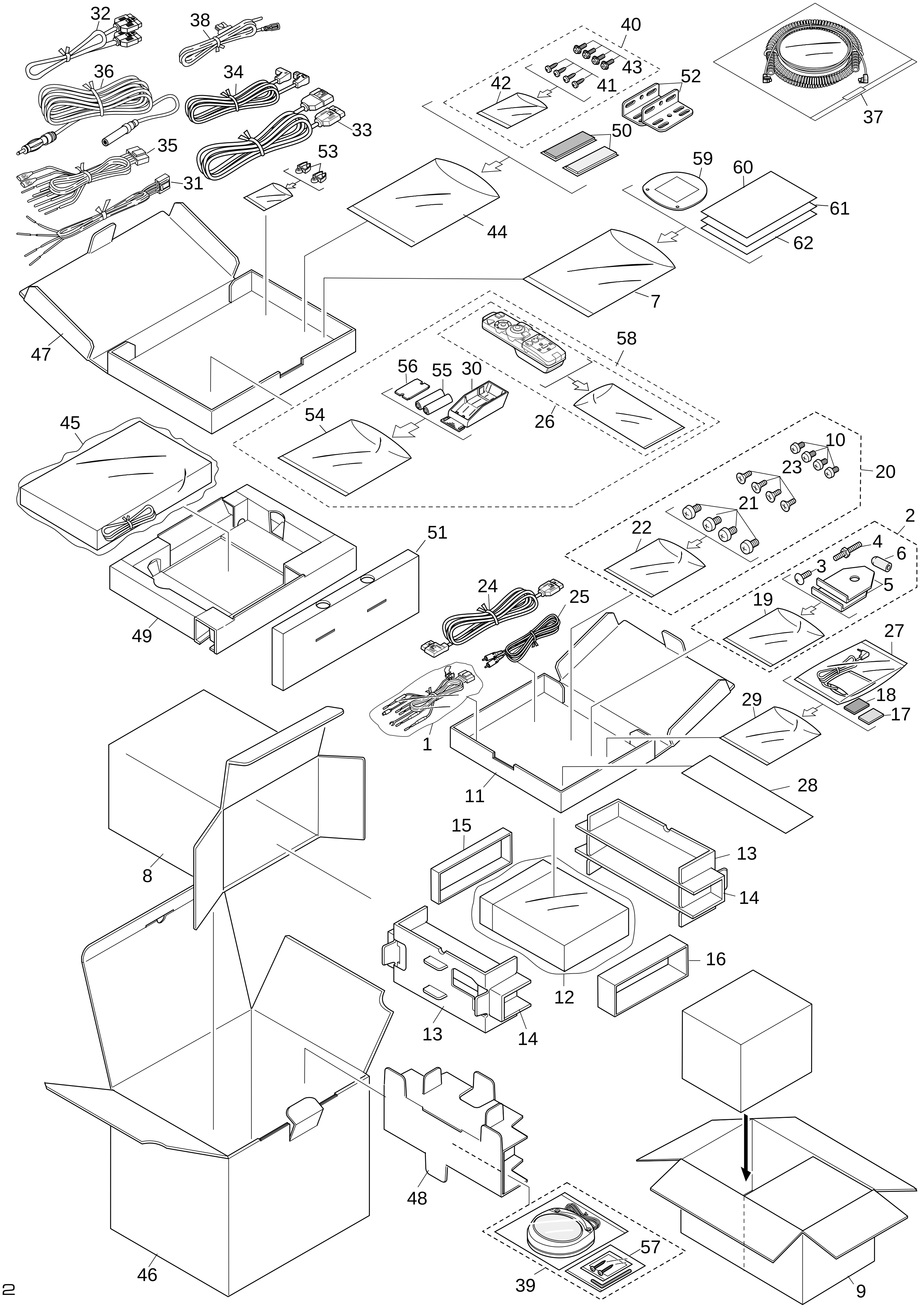
K-ZZD. APR. 2002 Printed in Japan

EXPLODED VIEWS AND PARTS LIST

PACKING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NOTE:

- Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.

● PACKING SECTION PARTS LIST

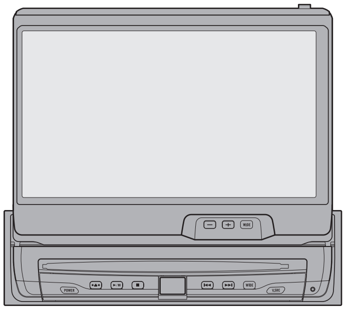
Mark	No.	Description	Part No.
	1	Cord Assy	CDE6668
	2	Accessory Assy	CEA2876
	3	Screw	BPZ20P060FMC
	4	Screw	CBA1002
	5	Bracket	CNC9383
	6	Bush	CNV1917
	7	Polyethylene Bag	CEG1116
	8	Sub Carton	CHG4729
	9	Contain Box	CHL4727
	10	Screw(M4x3)	CBA1468
	11	Sub Carton	CHA3172
	12	Polyethylene Bag	CEG1173
	13	Protector	CHP2445
	14	Protector	CHP2446
	15	Protector	CHP2385
	16	Protector	CHP2386
*	17	Fastener	CNM6544
*	18	Fastener	CNM6545
*	19	Polyethylene Bag	E36-615
	20	Screw Assy	CEA2927
	21	Screw	BMZ50P060FMC
*	22	Polyethylene Sheet	CNM4338
	23	Screw	CMZ50P060FMC
	24	Cord	CDE6570
	25	Cord Assy	CDE6376
	26	Remote Control Assy	CXB9291
	27	Speaker Unit	CXB6699
	28	Sheet	CNM7244
	29	Polyethylene Bag	CEG1116
	30	Holder	CNS5606
	31	Cord Assy	CDE5905
	32	Cord Assy	CDE5906
	33	Cord Assy	CDE5908
	34	Cord Assy	CDE6016
	35	Cord Assy	CDE6305
	36	Antenna Cord	CDH1265
	37	Cable	CDE6690
	38	Cord Assy	CDE6368
	39	Speaker Assy	CXB9300
*	40	Screw Assy	CEA2440
	41	Screw	BNC40P120FZK
*	42	Polyethylene Bag	CEG1158
	43	Screw	HMF40P080FZK
*	44	Polyethylene Bag	CEG1101
	45	Polyethylene Bag	CEG1181
	46	Carton	CHG4727
	47	Sub Carton	CHG4089
	48	Protector	CHP2572
	49	Protector	CHP2280
	50	Fastener	CNM3728
	51	Spacer	CHW1929
	52	Angle	CNB2351
	53	Clamper	CNV1343
	54	Polyethylene Bag	CEG1011
	55	Battery	CEX1021
	56	Sheet	CNM6370
	57	Accessory Assy	TEA1800
	58	Accessory Assy	CEA3302
	59	Plate	CNM7960
	60	Owner's Manual	CRB1764
	61	Installation Manual	CRB1765
*	62	Card	ARY1048

● Owner's Manual, Installation Manual

Model	Part No.	Language
AVH-P7490DVD/UC	CRB1764	English
	CRB1765	English

Pioneer

Service Manual



ORDER NO.
CRT2672

7 INCH WIDE AV SYSTEM DISPLAY/DVD PLAYER

AVX-P7300DVD UC

AVX-P7300DVD EW

AVX-P7300DVD ES/RD,ES/RC

COMPACT disc DIGITAL AUDIO

DVD VIDEO™

● This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech. Module	Remarks
CX-954	CRT2670	MS2	DVD Mech. Module:Circuit Description, Mech.Description, Disassembly

NOTE:

- **Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories. Confidential unpublished works. © 1992-1997 Dolby Laboratories. All rights reserved.**
- **Inverter for LCD back light becomes a high voltage.**
- **About FPC between control PCB and relay unit**
  There is a direction of the connector and the installation is noted.
  Please note that the length of the line is short at the time of detaching.

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PIONEER CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
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K-ZZU. MAY 2001 Printed in Japan

● **DVD Player Service Precautions**

1. Never adjust the LD VR in the pickup unit to protect the pickup from electrical damages.
2. For pickup unit(service)(CXX1530) handling, please refer to"Disassembly"(see page 109).
   During replacement, handling precautions shall be taken to prevent an electrostatic discharge(set the short switch of the pickup unit to the SHORT side).
3. During disassembly, be sure to turn the power off since an internal IC might be destroyed when a connector is plugged or unplugged.
4. Please adjusting the skew after changing the pickup unit(see page 83).

1. SAFETY INFORMATION

1.1 UC

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

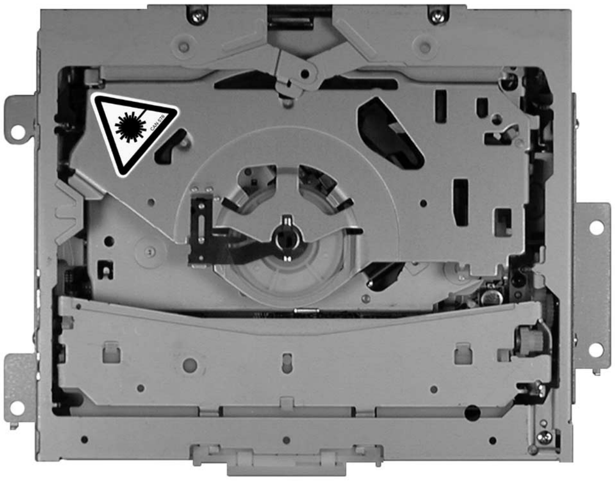
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

1.2 EW

1. **Safety Precautions for those who Service this Unit.**
- **Follow the adjustment steps (see pages 80 through 100)in the service manual when servicing this unit. When checking or adjusting the emitting power of the laser diode exercise caution in order to get safe, reliable results.**

Caution:
  1. **During repair or tests, minimum distance of 13cm from the focus lens must be kept.**
  2. **During repair or tests, do not view laser beam for 10 seconds or longer.**

2. **The triangular label is attached to the mechanism unit frame.**



CAUTION

This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product.
Refer all servicing to qualified personnel.

The following caution label appears on your unit.

Location: on the bottom of the unit

CLASS 1
LASER PRODUCT

En

On the bottom of the player.

CAUTION : VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.

VORSICHT : SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN!

ADVARSEL : SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING UNDGÅ UDSÆTTELSE FOR STRÀLING.

VARNING : SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD BETRAKTA EJ STRÅLEN.

VARO! : AVATTAESSA ALTISTUT NÄKYVÄ JA NÄKYMÄTTÖMÄLLE LASERSATEIL YLLE. ÄLÄ KATSO SÄTEESEN.

VRW1699

WARNING!

The AEL (accessible emission level)of the laser power output is less than CLASS 1 but the laser component is capable of emitting radiation exceeding the limit for CLASS 1.
A specially instructed person should do servicing operation of the apparatus.

Laser diode characteristics

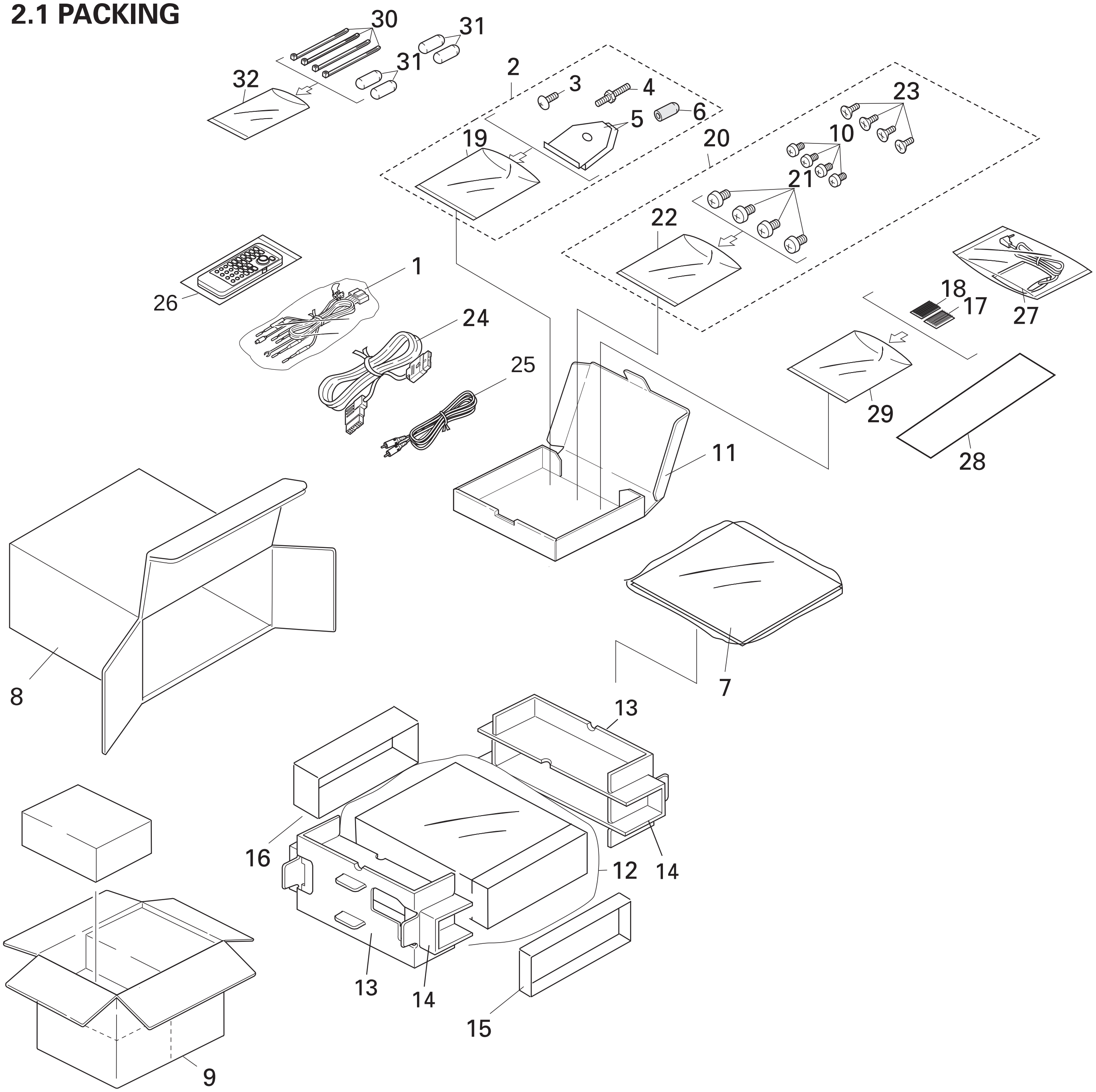
Wave length:
DVD:640~660nm
CD:770~810nm
Maximum output:2.44mw(Emitting period :9sec.)
DVD:743mw(Emitting period : unlimited)

Additionla Laser Caution

Transistors Q1104 and Q1108 in PCB drive the laser diodes for DVD and CD respectively. When Q1104 or Q1108 is shorted between their terminals, the laser diodes for DVD or CD will radiate beam. If the top cover is removed with no disc loaded while such short-circuit is continued, the naked eyes may be exposed to the laser beam.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING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● Owner's Manual

Part No.	Language
CRB1707	English
CRB1708	Spanish
CRB1709	German
CRB1710	French
CRB1711	Italian
CRB1712	Dutch
CRB1713	Chinese

● Installation Manual

Part No.	Language
CRD3479	English,French
CRD3435	English,Spanish,Dutch ,German,French,Italian
CRB1740	English
CRD3480	English,Chinese

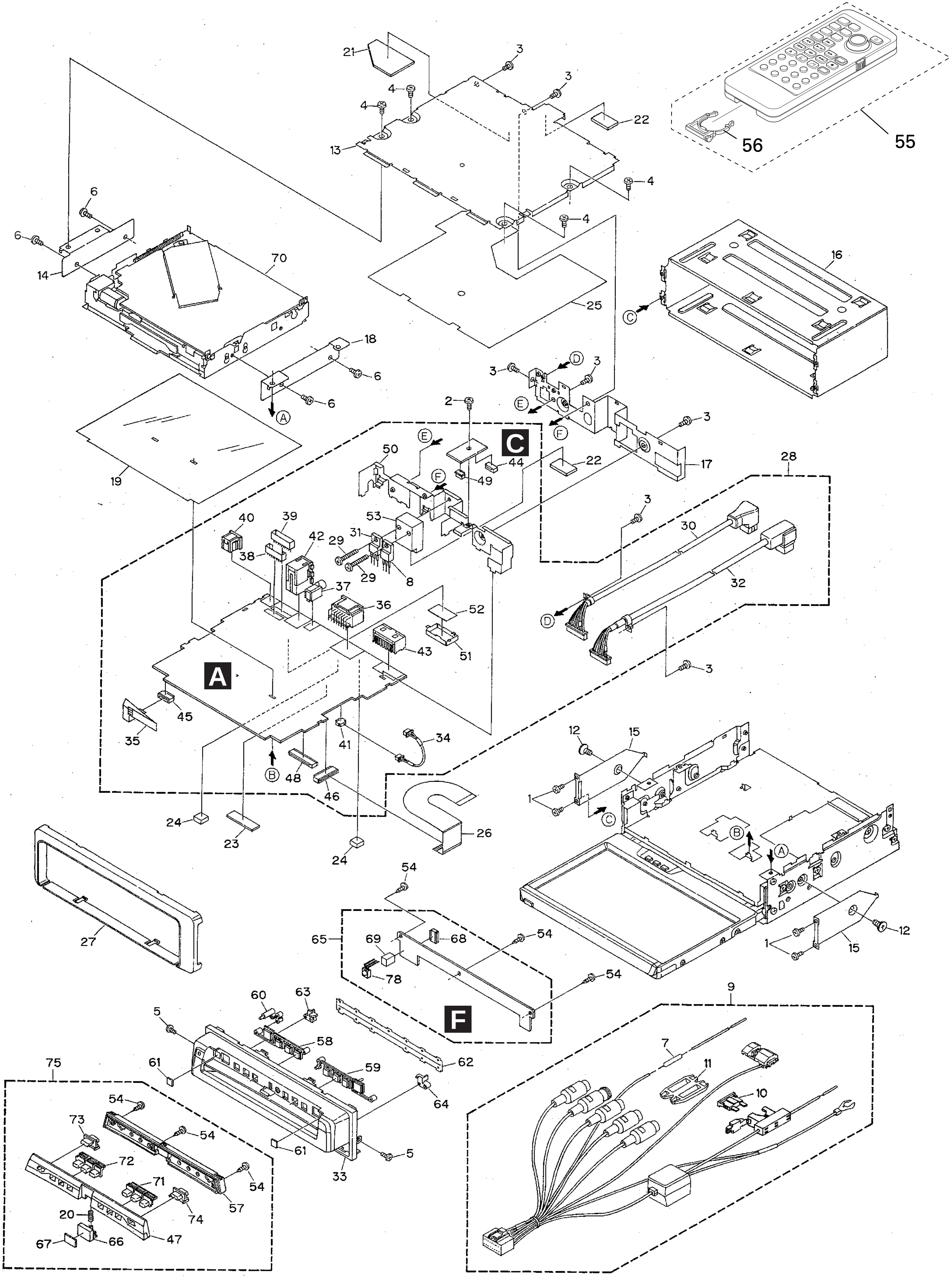
NOTE:

- Parts marked by "*"are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.

● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.			
			P7300DVD/UC	P7300DVD/EW	P7300DVD/ES/RD	P7300DVD/ES/RC
	1	Cord Assy	CDE6668	CDE6668	CDE6668	CDE6668
	2	Accessory Assy	CEA2876	CEA2876	CEA2876	CEA2876
	3	Screw	BPZ20P060FMC	BPZ20P060FMC	BPZ20P060FMC	BPZ20P060FMC
	4	Screw	CBA1002	CBA1002	CBA1002	CBA1002
	5	Bracket	CNC9383	CNC9383	CNC9383	CNC9383
	6	Bush	CNV1917	CNV1917	CNV1917	CNV1917
	7-1	Polyethylene Bag	CEG1116	CEG1116	CEG1116	CEG1116
	7-2	Owner's Manual	CRB1707	CRB1707	CRB1707	CRB1707
	7-3	Owner's Manual	Not used	CRB1708	Not used	CRB1713
	7-4	Owner's Manual	Not used	CRB1709	Not used	Not used
	7-5	Owner's Manual	CRB1710	CRB1710	Not used	Not used
	7-6	Owner's Manual	Not used	CRB1711	Not used	Not used
	7-7	Owner's Manual	Not used	CRB1712	Not used	Not used
	7-8	Installation Manual	CRD3479	CRD3435	CRB1740	CRD3480
*	7-9	Warranty Card	Not used	CRY1157	CRY1157	CRY1157
*	7-10	Card	ARY1048	Not used	Not used	Not used
*	7-11	Caution Card	Not used	CRP1250	CRP1250	Not used
*	7-12	Caution Card	CRP1253	CRP1253	CRP1253	CRP1253
*	7-13	Caution Card	Not used	CRP1256	Not used	Not used
	8	Carton	CHG4402	CHG4401	CHG4404	CHG4403
	9	Contain Box	CHL4402	CHL4401	CHL4404	CHL4403
	10	Screw(M4x3)	CBA1468	CBA1468	CBA1468	CBA1468
	11	Sub Carton	CHA3172	CHA3172	CHA3172	CHA3172
	12	Polyethylene Bag	CEG1173	CEG-162	CEG-162	CEG-162
	13	Protector	CHP2445	CHP2445	CHP2445	CHP2445
	14	Protector	CHP2446	CHP2446	CHP2446	CHP2446
	15	Protector	CHP2385	CHP2385	CHP2385	CHP2385
	16	Protector	CHP2386	CHP2386	CHP2386	CHP2386
*	17	Fastener	CNM6544	CNM6544	Not used	Not used
*	18	Fastener	CNM6545	CNM6545	Not used	Not used
*	19	Polyethylene Bag	E36-615	E36-615	E36-615	E36-615
	20	Screw Assy	CEA2927	CEA2927	CEA2927	CEA2927
	21	Screw	BMZ50P060FMC	BMZ50P060FMC	BMZ50P060FMC	BMZ50P060FMC
*	22	Polyethylene Sheet	CNM4338	CNM4338	CNM4338	CNM4338
	23	Screw	CMZ50P060FMC	CMZ50P060FMC	CMZ50P060FMC	CMZ50P060FMC
	24	Cord	CDE6570	CDE6570	CDE6570	CDE6570
	25	Cord Assy	CDE6376	CDE6376	CDE6376	CDE6376
	26	Remote Control Unit	CXB7969	CXB7969	CXB7969	CXB7969
	27	Speaker Unit	CXB6699	CXB6699	Not used	Not used
	28	Sheet	CNM7244	CNM7244	CNM7244	CNM7244
*	29	Polyethylene Bag	CEG1116	CEG1116	Not used	Not used
	30	Lock Tie	Not used	CNV-754	CNV-754	Not used
*	31	Filter	Not used	CTX1060	CTX1060	Not used
*	32	Polyethylene Bag	Not used	CEG-158	CEG-158	Not used

2.2 EXTERIOR(1/3)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(1) EXTERIOR(1/3) SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BMZ20P030FZK
	2	Screw	BMZ20P040FMC
	3	Screw	BMZ26P040FMC
	4	Screw	BSZ26P050FMC
	5	Screw(M1.7x3)	CBA1475
	6	Screw(M2x2)	CBA1487
	7	Resistor	RS1/2P102JL
	8	Transistor(Q20)	2SD2396
	9	Cord Assy	CDE6668
	10	Fuse(5A)	CEK1135
	11	Cap	CNS1472
	12	Screw	CMZ50P060FMC
	13	Case	CNB2702
	14	Bracket	CNC9368
	15	Bracket	CNC9389
	16	Holder	CNC9510
	17	Panel	See Contrast table(2)
	18	Bracket	CNC9698
	19	Insulator	CNM7241
	20	Spring	CBH2479
	21	Sheet	CNM7407
	22	Sheet	CNM7419
	23	Spacer	CNM7465
	24	Spacer	CNM7466
	25	Insulator	CNM7540
	26	PCB	CNP6274
	27	Panel	See Contrast table(2)
	28	Control Unit	See Contrast table(2)
	29	Screw	BMZ26P200FMC
	30	Cord	CDE6568
*	31	Transistor(Q33)	2SD2396
	32	Cord	CDE6569
	33	Grille Unit	See Contrast table(2)
	34	Cord	CDE6574
	35	Cable	CDE6575
	36	Plug(CN401)	CKM1187
	37	Jack(CN202)	See Contrast table(2)
	38	Plug(CN402)	CKS-790
	39	Plug(CN801)	CKS1043
	40	Connector(CN851)	CKS1940

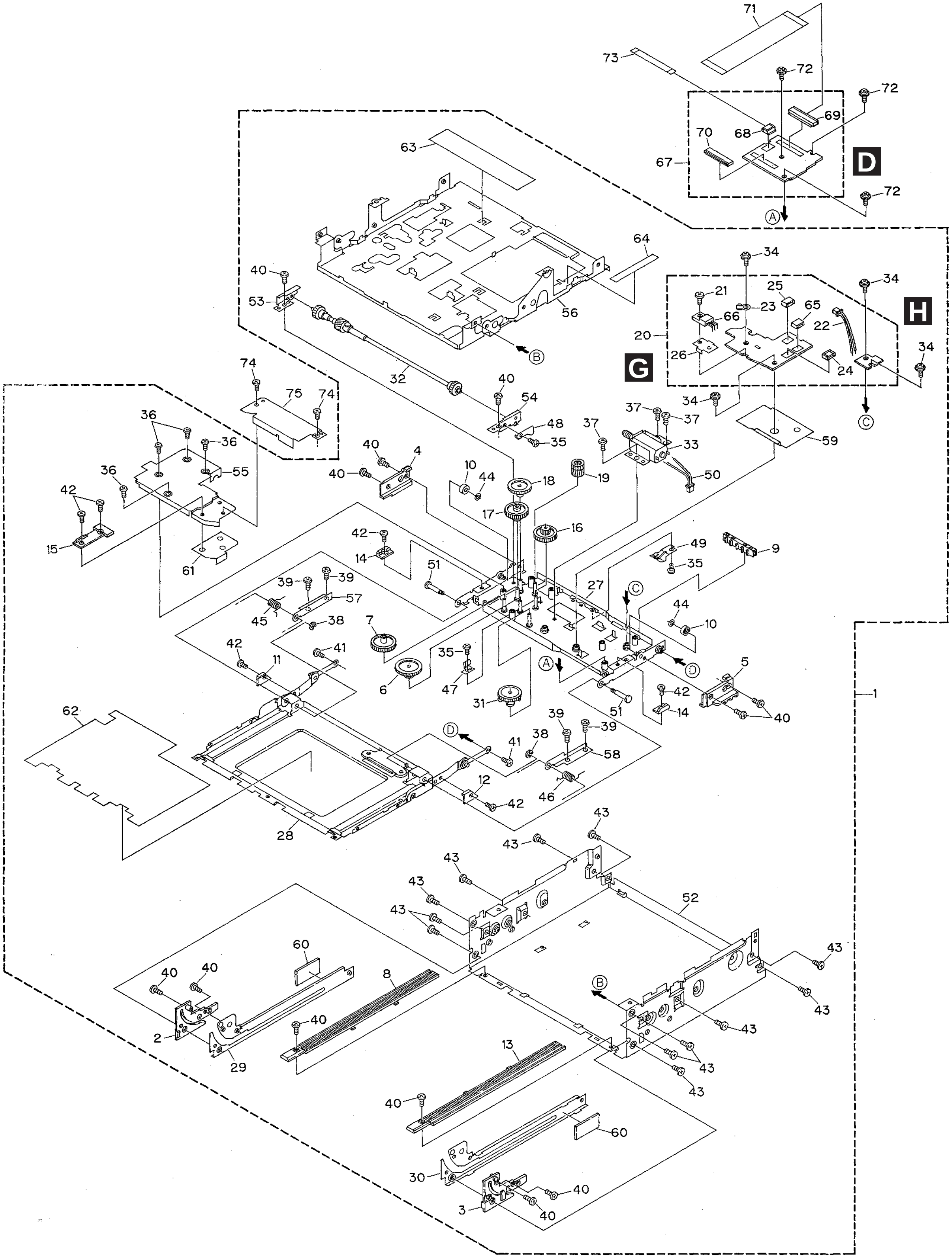
Mark	No.	Description	Part No.
	41	Connector(CN252)	CKS2191
	42	Connector(CN802)	CKS2602
	43	Connector(CN201)	CKS3645
	44	Connector(CN262)	CKS3902
	45	Connector(CN651)	CKS3970
	46	Connector(CN251)	CKS4052
	47	Grille Unit	See Contrast table(2)
	48	Connector(CN101)	CKS4495
	49	Connector(CN261)	CKS4496
	50	Bracket	CNC9371
	51	Holder	CNC9653
	52	Insulator	CNM7531
	53	Heat Sink	CNR1609
	54	Screw	BPZ20P060FMC
	55	Remote Control Unit	CXB7969
	56	Cover	CZN5357
	57	Cover	CNS6559
	58	Button	CAC6992
	59	Button	CAC6993
	60	Button	CAC6997
*	61	Cushion	CNM6270
	62	Cover	CNM7243
	63	Lighting Conductor	CNV6714
	64	Lighting Conductor	CNV6715
	65	Keyboard Unit	See Contrast table(2)
	66	Button	See Contrast table(2)
*	67	Badge	CAH1771
	68	Connector(CN1901)	CKS4511
	69	Spacer	CNM7247
	70	DVD Mechanism Module(MS2)	CXK6115
	71	Button(EJE,PLAY,STOP)	CAC6995
	72	Button(CHP/TR,V.SRC)	CAC6996
	73	Button(RGB)	CAC7003
	74	Button(POWER)	CAC7004
	75	Detach Grille Assy	See Contrast table(2)
	76,77	•••••	
	78	IC(IC1901)	TSOP1840SB1

(2) CONTRAST TABLE

AVX-P7300DVD/UC , AVX-P7300DVD/EW , AVX-P7300DVD/ES/RD and AVX-P7300DVD/ES/RC are constructed the same except for the following:

Mark	No.	Description	Part No.			
			P7300DVD/UC	P7300DVD/EW	P7300DVD/ES/RD	P7300DVD/ES/RC
	17	Panel	CNC9689	CNC9689	CNC9703	CNC9703
	27	Panel	CNS6571	CNS6571	CNS6627	CNS6627
	28	Control Unit	CWM7738	CWM7737	CWM7740	CWM7739
	33	Grille Unit	CXB7279	CXB7279	CXB7278	CXB7278
	37	Jack(CN202)	CKN1027	CKN1027	Not used	Not used
	47	Grille Unit	CXB7284	CXB7284	CXB7285	CXB7285
	65	Keyboard Unit	CWM7744	CWM7745	CWM7744	CWM7744
	66	Button	CAC6994	CAC6994	CAC7011	CAC7011
	75	Detach Grille Assy	CXB7121	CXB7121	CXB7123	CXB7123

2.3 EXTERIOR(2/3)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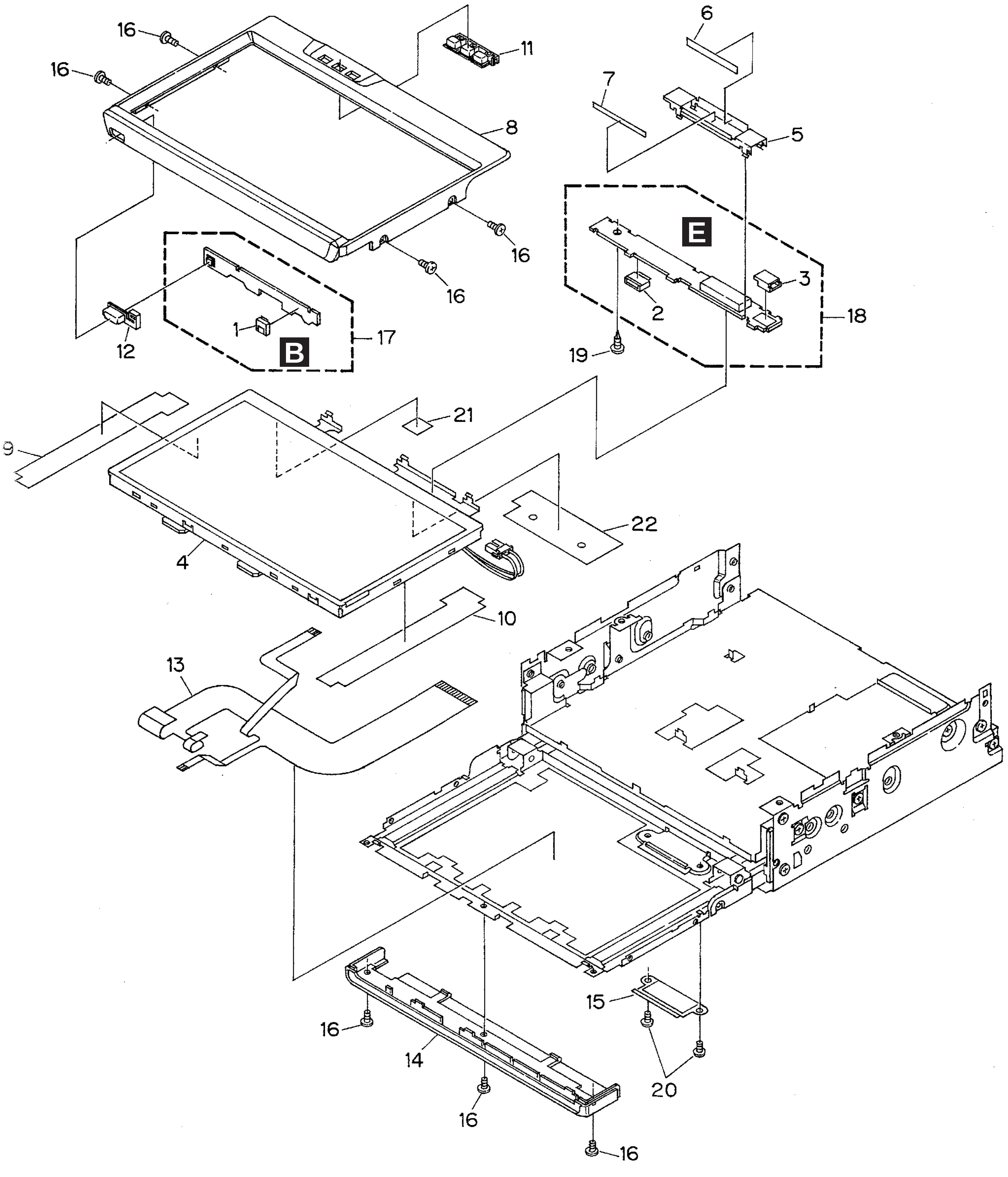
● EXTERIOR(2/3) SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Drive Unit	CXB7323
	2	Rail	CNS6492
	3	Rail	CNS6493
	4	Guide	CNS6494
	5	Guide	CNS6495
	6	Gear	CNV6654
	7	Gear	CNV6655
	8	Rack	CNV6669
	9	Guide	CNV6672
	10	Roller	CNV6673
	11	Guide	CNV6750
	12	Guide	CNV6751
	13	Rack	CNV6752
	14	Guide	CNV6765
	15	Guide	CNV6766
	16	Gear	CNV6824
	17	Gear	CNV6825
	18	Gear	CNV6826
	19	Gear	CNV6827
	20	Encoder Unit	CWM7620
	21	Screw	BMZ26P050FMC
	22	Cord Assy	CDE6686
	23	Terminal(CN2801)	CKF1064
	24	Connector(CN2804)	CKS4054
	25	Connector(CN2805)	CKS4282
	26	Heat Sink	CNC9312
	27	Frame Unit	CXB7051
*	28	Case Unit	CXB7052
	29	Rail Unit	CXB7064
	30	Rail Unit	CXB7065
	31	Gear Unit	CXB7437
	32	Shaft Unit	CXB7611
	33	Motor Unit(M1)(Drive Motor)	CXB7612
	34	Screw	IMS20P030FMC
	35	Screw	JFZ20P020FZK
	36	Screw	JFZ20P040FZK
	37	Screw	JGZ20P020FMC
	38	Washer	YE20FUC
	39	Screw(M2x2.2)	CBA1419
	40	Screw(M2x2.5)	CBA1447
	41	Screw(M1.7x3)	CBA1475
	42	Screw(M2x2)	CBA1484
	43	Screw(M3x3)	CBA1534
	44	Washer	CBF1064
	45	Spring	CBH2469
	46	Spring	CBH2470
	47	Spring	CBL1527
	48	Spring	CBL1534
	49	Spring	CBL1545
	50	Cord Assy	CDE6685
	51	Shaft	CLA4007
	52	Chassis	CNA2385
	53	Holder	CNC9302
	54	Holder	CNC9303
	55	Cover	CNC9304
	56	Frame	CNC9455
	57	Holder	CNC9516
	58	Holder	CNC9517
	59	Insulator	CNM7380
	60	Cushion	CNM7377
	61	Insulator	CNM7335
	62	Sheet	CNM7415
	63	Insulator	CNM7490
	64	Insulator	CNM7491
	65	Connector(CN2806)	CKS4282
	66	IC(IC2801)	TA7806S
	67	Relay Unit	CWM7752
	68	Connector(CN1102)	CKS4054
	69	Connector(CN1103)	CKS4495
	70	Connector(CN1101)	CKS4495
	71	PCB	CNP6440
	72	Screw(M2x2.5)	CBA1076
	73	FFC	CDE6555
	74	Screw(UC,EW)	CBA1484
		Screw(ES/RD,ES/RC)	CBA1551
	75	Cover	CNC9467

2.4 EXTERIOR(3/3)


16
16
11
6
7
8
5
E
3
2
18
19
16
16
1
17
12
B
21
9
22
4
10
13
15
16
14
20
16
16

(1) EXTERIOR(3/3) SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Connector(CN1301)	CKS4448
	2	Connector(CN2941)	CKS4054
	3	Connector(CN2942)	CKS4428
	4	LCD Module	CWX2565
	5	Holder	CNC9500
	6	Insulator	CNM7351
	7	Insulator	CNM7352
	8	Grille Unit	See Contrast table(2)
	9	Sheet	CNM7592
	10	Sheet	CNM7591

Mark	No.	Description	Part No.
	11	Button(WIDE/ANGLE)	CAC7013
	12	Button(OPEN/CLOSE)	CAC7014
	13	PCB	CNP6272
	14	Cover	See Contrast table(2)
	15	Holder	CNC9535
	16	Screw	See Contrast table(2)
	17	Control Unit	See Contrast table(2)
	18	Keyboard Unit	See Contrast table(2)
	19	Screw	BPZ20P060FMC
	20	Screw	JFZ20P022FNI
	21	Sheet	CNM7593
	22	Sheet	CNM7594

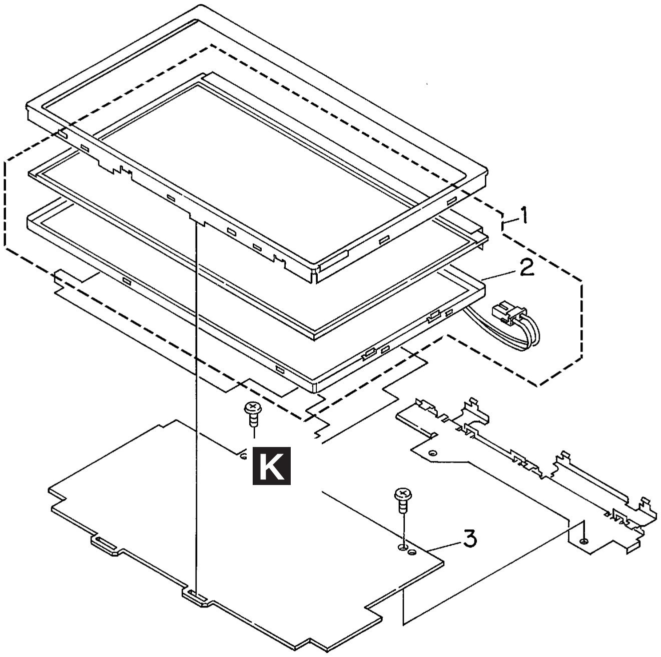
- ● Please stop the reuse of this sheet when you peel off sheet(9,10,21,22).

(2) CONTRAST TABLE

AVX-P7300DVD/UC , AVX-P7300DVD/EW , AVX-P7300DVD/ES/RD and AVX-P7300DVD/ES/RC are constructed the same except for the following:

			Part No.			
Mark	No.	Description	P7300DVD/UC	P7300DVD/EW	P7300DVD/ES/RD	P7300DVD/ES/RC
	8	Grille Unit	CXB7535	CXB7535	CXB7536	CXB7536
	14	Cover	CNS6628	CNS6628	CNS6564	CNS6564
	16	Screw	CBA1484	CBA1484	CBA1551	CBA1551
	17	Control Unit	CWM7738	CWM7737	CWM7740	CWM7739
	18	Keyboard Unit	CWM7744	CWM7745	CWM7744	CWM7744

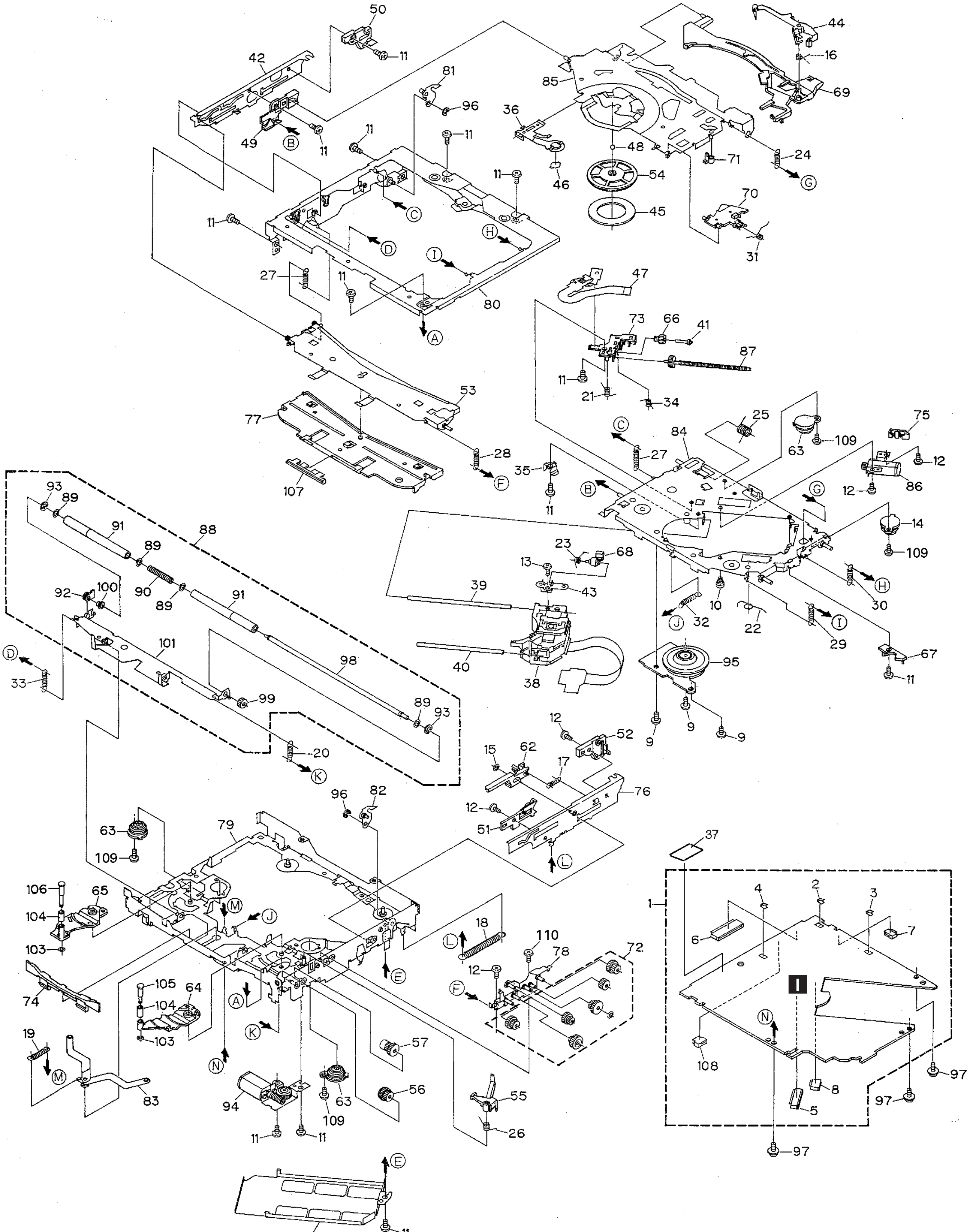
2.5 LCD MODULE



● LCD MODULE SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	LCD Module	TFD70W80
	2	Back Light Unit	NML75-9252-P
	3	Video Schematic	NMP70-9253-P

2.6 DVD MECHANISM MODULE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42
81
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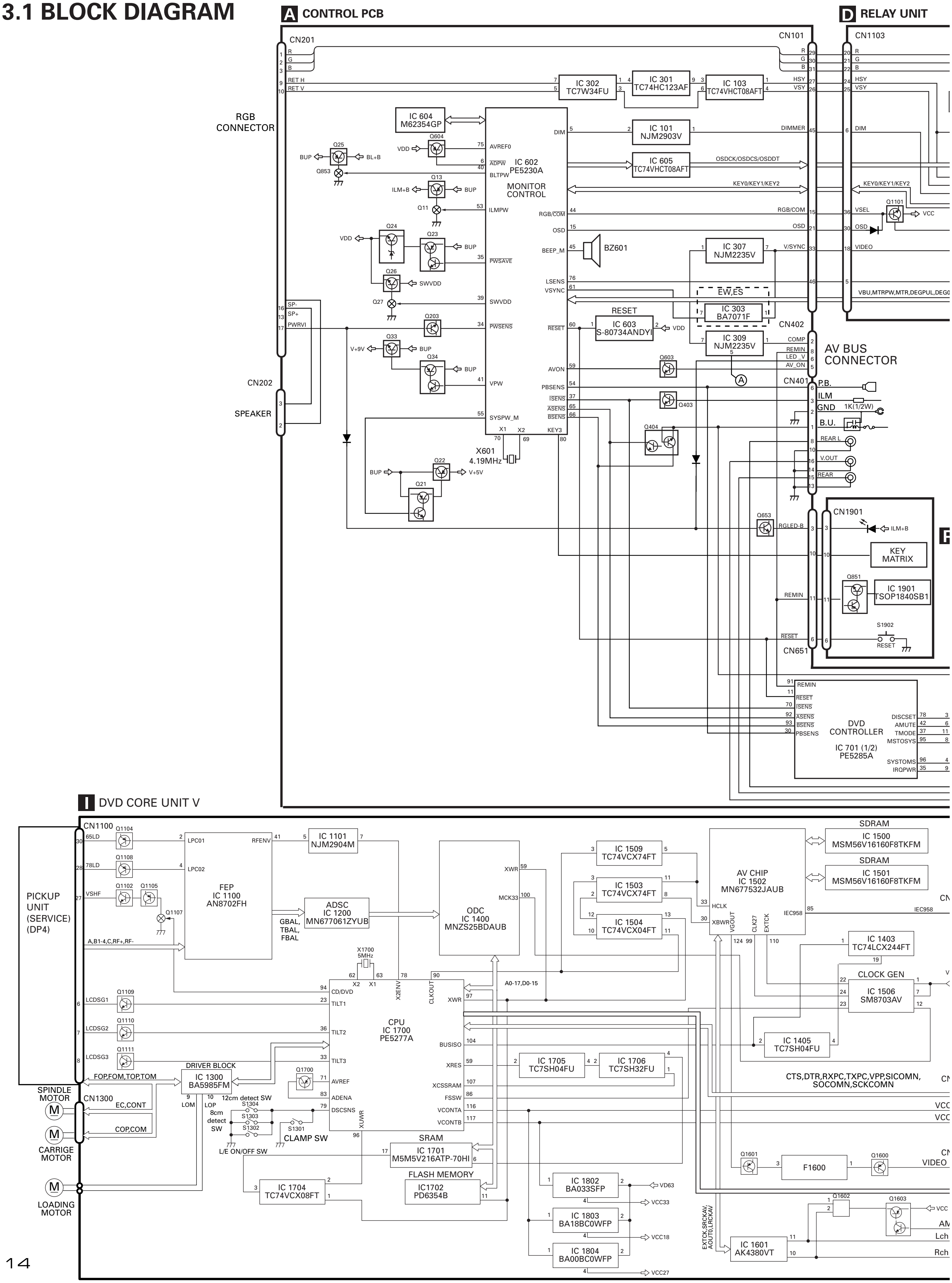
49
B
11
11
11
85
44
16
69
36
48
24
G
71
54
46
45
70
31
11
C
11
H
D
I
27
11
80
A
47
73
66
41
87
11
21
34
53
77
28
F
107
C
25
84
27
75
63
109
12
86
35
B
11
G
12
14
109
93
89
91
88
89
90
89
91
92
100
23
68
13
43
39
10
32
J
22
30
H
29
I
67
11
D
33
101
98
40
38
95
99
89
93
9
9
9
20
K
12
52
15
62
17
76
96
82
12
51
L
37
63
79
109
106
65
104
103
M
J
1
4
2
3
6
7
18
L
110
78
72
12
F
E
A
105
64
104
103
74
19
M
N
K
57
83
94
63
109
56
55
26
11
11
I
N
108
97
8
97
5
97
E
102
11

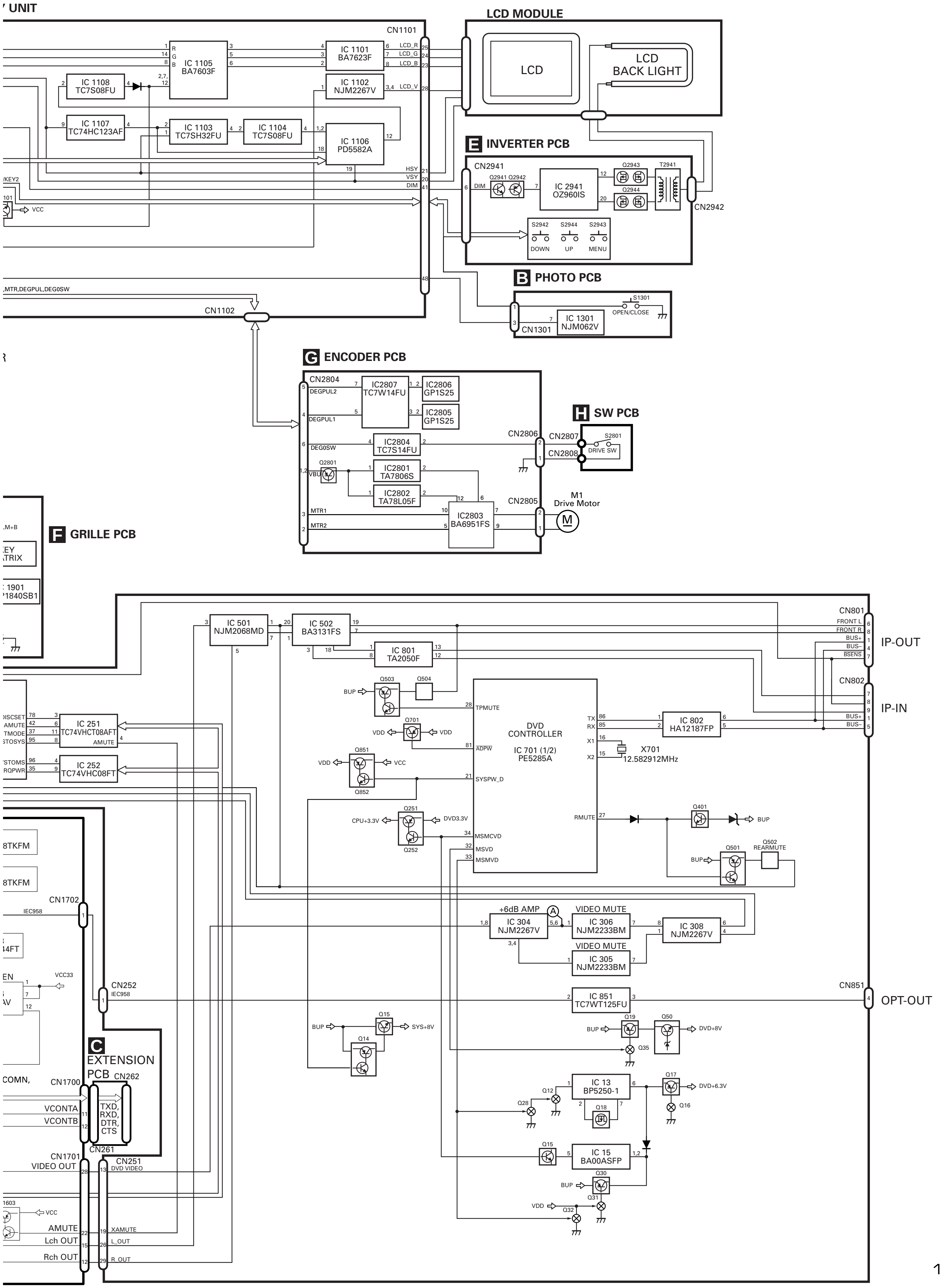
● DVD MECHANISM MODULE SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	DVD core unit V	CWX2574
	2	Terminal(CN1703)	CKF1065
	3	Terminal(CN1705)	CKF1065
	4	Terminal(CN1706)	CKF1065
	5	Connector(CN1100)	CKS3749
	6	Connector(CN1701)	CKS4052
	7	Connector(CN1700)	CKS4374
	8	Connector(CN1300)	CKS4507
	9	Screw(M2x3)	CBA1486
	10	Screw	CBA1535
	11	Screw(M2x2.2)	CBA1547
	12	Screw(M2x2.2)	CBA1548
	13	Screw(M1.4x2)	CBA1549
	14	Damper	CNV6927
	15	Washer	CBF1038
	16	Spring	CBH2394
	17	Spring	CBH2395
	18	Spring	CBH2396
	19	Spring	CBH2397
	20	Spring	CBH2398
	21	Spring	CBH2399
	22	Spring	CBH2400
	23	Spring	CBH2401
	24	Spring	CBH2402
	25	Spring	CBH2403
	26	Spring	CBH2404
	27	Spring	CBH2405
	28	Spring	CBH2406
	29	Spring	CBH2407
	30	Spring	CBH2408
	31	Spring	CBH2410
	32	Spring	CBH2411
	33	Spring	CBH2413
	34	Spring	CBH2414
	35	Spring	CBL1499
	36	Spring	CBL1500
	37	Sheet	CNM7590
	38	Pickup Unit(Service)(DP4)	CXX1530
	39	Shaft	CLA3878
	40	Shaft	CLA3879
	41	Shaft	CLA3881
	42	Lever	CNC8988
	43	Bracket	CNC8992
	44	Arm	CNC8994
	45	Sheet	CNM6883
	46	Sheet	CNM6884
	47	PCB	CNP5971
	48	Ball	CNR1189
	49	Guide	CNV6352
	50	Guide	CNV6353
	51	Guide	CNV6354
	52	Guide	CNV6355
	53	Guide	CNV6356
	54	Clamper	CNV6357
	55	Arm	CNV6358
	56	Gear	CNV6361
	57	Gear	CNV6362
	58-61	•••••	
	62	Rack	CNV6367
	63	Damper	CNV6368
	64	Arm	CNV6369
	65	Arm	CNV6370
	66	Gear	CNV6372
	67	Holder	CNV6374
	68	Rack	CNV6376
	69	Arm	CNV6377
	70	Arm	CNV6378
	71	Arm	CNV6379
	72	Gear Unit	CXB5959
	73	Holder	CNV6383
	74	Guide	CNV6384
	75	Holder	CNV6385
	76	Lever Unit	CXB5943
	77	Holder Unit	CXB5944
*	78	Holder Unit	CXB5947
	79	Frame Unit	CXB5948
	80	Frame Unit	CXB5949
	81	Arm Unit	CXB5950
	82	Arm Unit	CXB5951
	83	Arm Unit	CXB5952
	84	Chassis Unit	CXB5953
	85	Arm Unit	CXB5954
	86	Motor Unit(CRG)	CXB5955
	87	Screw Unit	CXB5957
	88	Roller Unit	CXB5958
	89	Washer	CBF1060
	90	Spring	CBH2170
	91	Roller	CNV6068
	92	Holder	CNV6210
	93	Washer	YE20FUC
	94	Motor Unit(LOAD)	CXB5960
	95	Motor Unit(SPDL)	CXB6218
	96	Washer	YE15FUC
	97	Screw	IMS20P030FMC
*	98	Shaft	CLA3877
*	99	Gear	CNV6359
*	100	Caller	CNV6382
*	101	Arm Unit	CXB5945
	102	Cover	CNC9532
	103	Washer	CBF1087
	104	Roller	CNV6928
	105	Shaft	CLA4091
	106	Shaft	CLA4092
	107	Guide	CNV6805
	108	Connector(CN1702)	CKS4282
	109	Screw (M2x3.5)	CBA1560
	110	Screw (M2x2.2)	CBA1419

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

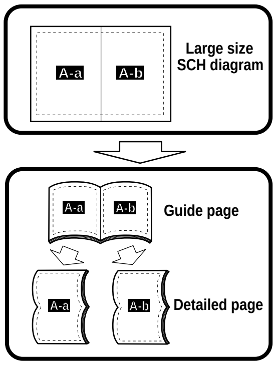

A CONTROL PCB
D RELAY UNIT
I DVD CORE UNIT V
CN201
CN101
CN1103
RGB CONNECTOR
IC 302 TC7W34FU
IC 301 TC74HC123AF
IC 103 TC74VHCT08AFT
IC 604 M62354GP
IC 602 PE5230A MONITOR CONTROL
IC 101 NJM2903V
IC 605 TC74VHCT08AFT
OSDCK/OSDCS/OSDDT
KEY0/KEY1/KEY2
Q1101
BZ601
IC 307 NJM2235V
EW,ES
IC 303 BA7071F
RESET
IC 603 S-80734ANDYI
IC 309 NJM2235V
CN402
AV BUS CONNECTOR
CN401
P.B.
ILM
GND
1K(1/2W)
B.U.
REAR L
V.OUT
REAR
CN202
SPEAKER
X601 4.19MHz
CN1901
KEY MATRIX
IC 1901 TSOP1840SB1
S1902 RESET
CN651
DVD CONTROLLER IC 701 (1/2) PE5285A
VBU,MTRPW,MTR,DEGPUL,DEG0
PICKUP UNIT (SERVICE) (DP4)
CN1100
FEP IC 1100 AN8702FH
IC 1101 NJM2904M
ADSC IC 1200 MN677061ZYUB
GBAL, TBAL, FBAL
ODC IC 1400 MNZS25BDAUB
IC 1509 TC74VCX74FT
IC 1503 TC74VCX74FT
IC 1504 TC74VCX04FT
AV CHIP IC 1502 MN677532JAUB
SDRAM IC 1500 MSM56V16160F8TKFM
SDRAM IC 1501 MSM56V16160F8TKFM
IC 1403 TC74LCX244FT
CLOCK GEN IC 1506 SM8703AV
IC 1405 TC7SH04FU
X1700 5MHz
CPU IC 1700 PE5277A
A0-17,D0-15
DRIVER BLOCK IC 1300 BA5985FM
FOP,FOM,TOP,TOM
SPINDLE MOTOR
CN1300
EC,CONT
COP,COM
CARRIGE MOTOR
LOADING MOTOR
12cm detect SW
8cm detect SW
CLAMP SW
L/E ON/OFF SW
IC 1705 TC7SH04FU
IC 1706 TC7SH32FU
CTS,DTR,RXPC,TXPC,VPP,SICOMN, SOCOMN,SCKCOMN
SRAM IC 1701 M5M5V216ATP-70HI
FLASH MEMORY IC1702 PD6354B
IC 1704 TC74VCX08FT
IC 1802 BA033SFP
IC 1803 BA18BC0WFP
IC 1804 BA00BC0WFP
VD63
VCC33
VCC18
VCC27
F1600
Q1601
Q1600
VIDEO
IC 1601 AK4380VT
EXTCK,SRCKAV, AOUT0,LRCKAV
Lch
Rch
IEC958

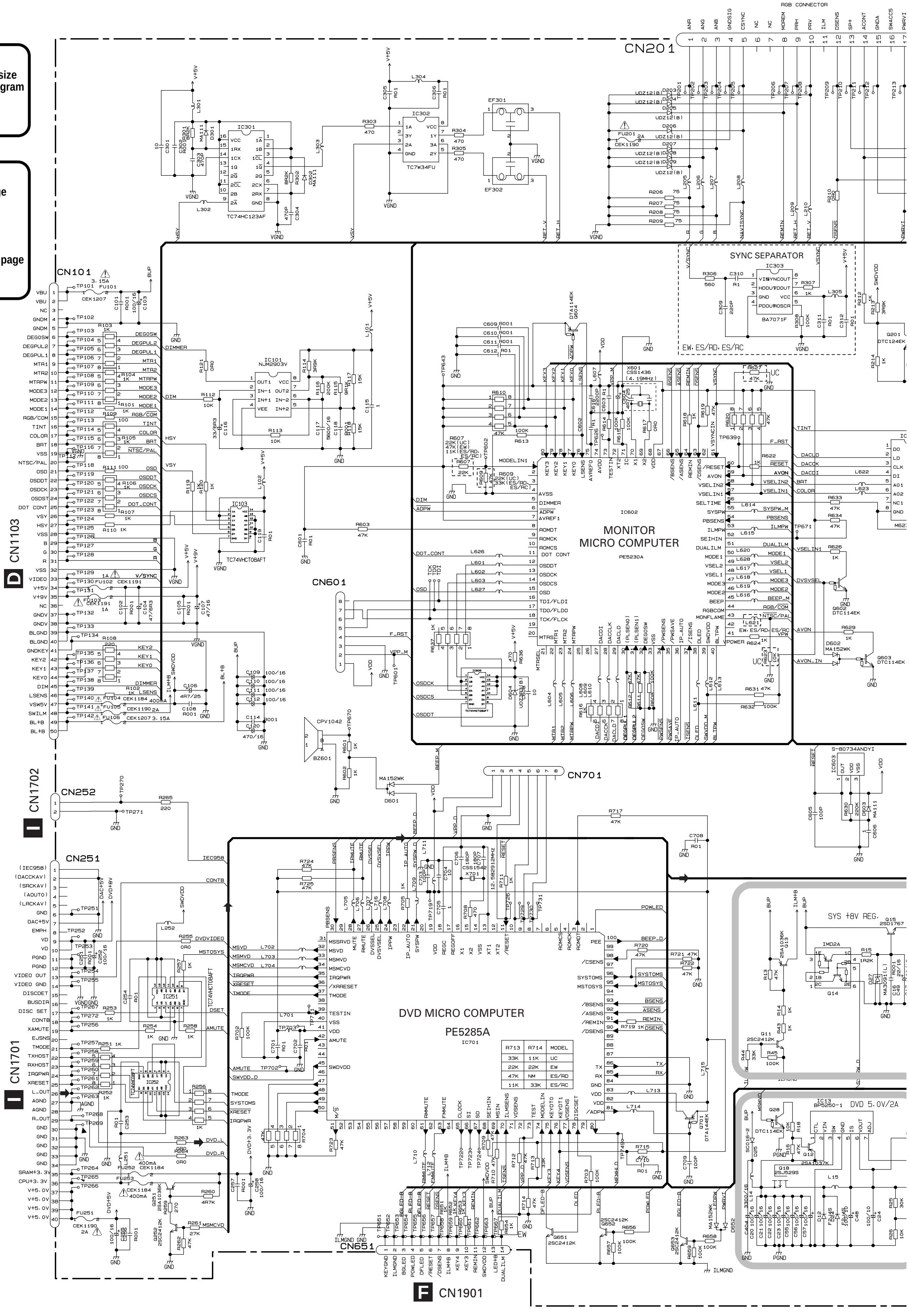

UNIT
CN1101
IC 1105
BA7603F
IC 1101
BA7623F
LCD_R
LCD_G
LCD_B
IC 1108
TC7S08FU
IC 1102
NJM2267V
LCD_V
IC 1107
TC74HC123AF
IC 1103
TC7SH32FU
IC 1104
TC7S08FU
IC 1106
PD5582A
HSY
VSY
DIM
/KEY2
VCC
,MTR,DEGPUL,DEG0SW
CN1102
LCD MODULE
LCD
LCD
BACK LIGHT
E INVERTER PCB
CN2941
Q2941 Q2942
DIM
IC 2941
OZ960IS
Q2943
Q2944
T2941
CN2942
S2942
S2944
S2943
DOWN
UP
MENU
B PHOTO PCB
S1301
OPEN/CLOSE
IC 1301
NJM062V
CN1301
G ENCODER PCB
CN2804
DEGPUL2
DEGPUL1
DEG0SW
IC2807
TC7W14FU
IC2806
GP1S25
IC2805
GP1S25
IC2804
TC7S14FU
Q2801
VBU
IC2801
TA7806S
IC2802
TA78L05F
MTR1
MTR2
IC2803
BA6951FS
CN2806
CN2805
H SW PCB
CN2807
CN2808
S2801
DRIVE SW
M1
Drive Motor
M
F GRILLE PCB
,M+B
EY
ATRIX
1901
P1840SB1
IC 501
NJM2068MD
IC 502
BA3131FS
IC 801
TA2050F
CN801
FRONT L
FRONT R
BUS+
BUS–
BSENS
IP-OUT
CN802
IP-IN
BUS+
BUS–
BUP
Q503
Q504
TPMUTE
DVD
CONTROLLER
IC 701 (1/2)
PE5285A
TX
RX
X1
X2
IC 802
HA12187FP
X701
12.582912MHz
VDD
Q701
VDD
ADPW
Q851
VDD
VCC
Q852
SYSPW_D
DISCSET
AMUTE
TMODE
STOSYS
IC 251
TC74VHCT08AFT
AMUTE
STOMS
RQPWR
IC 252
TC74VHC08FT
Q251
CPU+3.3V
DVD3.3V
Q252
MSMCVD
MSVD
MSMVD
RMUTE
Q401
BUP
Q501
Q502
REARMUTE
BUP
8TKFM
8TKFM
CN1702
IEC958
+6dB AMP
A
IC 304
NJM2267V
VIDEO MUTE
IC 306
NJM2233BM
IC 308
NJM2267V
VIDEO MUTE
IC 305
NJM2233BM
4FT
EN
VCC33
AV
CN252
IEC958
CN851
IC 851
TC7WT125FU
OPT-OUT
BUP
Q15
SYS+8V
Q14
Q19
Q50
BUP
DVD+8V
Q35
C EXTENSION PCB
CN262
COMN,
CN1700
VCONTA
VCONTB
TXD,
RXD,
DTR,
CTS
IC 13
BP5250-1
Q12
Q28
Q18
Q17
DVD+6.3V
Q16
CN261
CN1701
VIDEO OUT
CN251
DVD VIDEO
Q15
IC 15
BA00ASFP
Q30
BUP
Q31
VDD
Q32
1603
VCC
AMUTE
XAMUTE
Lch OUT
L_OUT
Rch OUT
R_OUT

3.2 CONTROL PCB(GUIDE PAGE)

A-a

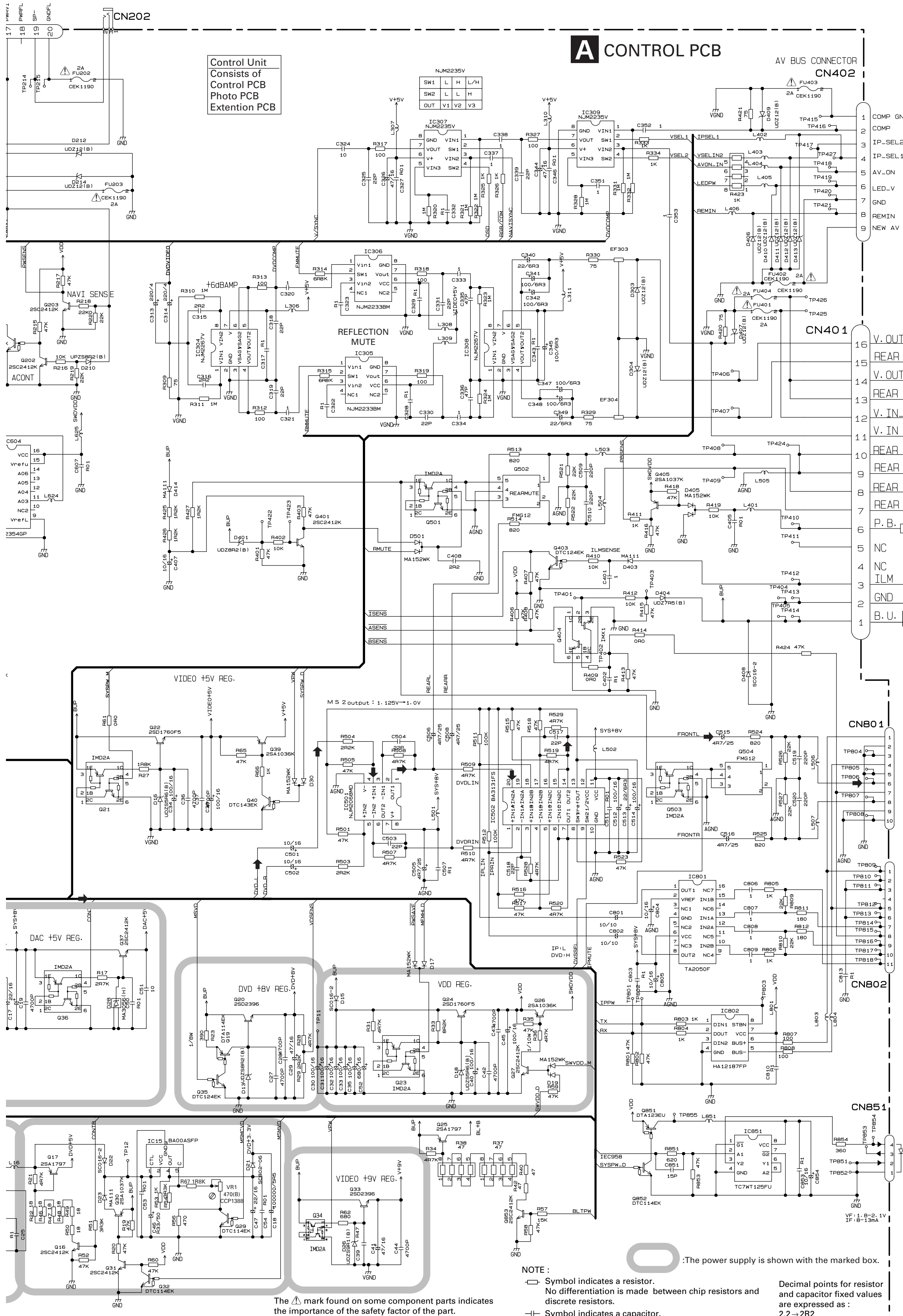
Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".


A-a
A-b
Large size SCH diagram
A-a
A-b
Guide page
A-a
A-b
Detailed page


RGB CONNECTOR
CN201
ANR
ANG
ANB
GNDSIG
CSYNC
NC
NC
MDREM
PRH
PRV
ILM
DSENS
SP+
ACONT
GNDA
SWACC5
PWRVI
IC301
TC74HC123AF
IC302
TC7W34FU
EF301
EF302
CN101
CN1103
D
VBU
GNDM
DEGOSW
DEGPUL2
DEGPUL1
MTR1
MTR2
MTRPW
MODE3
MODE2
MODE1
RGB/COM
TINT
COLOR
BRT
VSS
NTSC/PAL
OSD
OSDDT
OSDCK
OSDCS
OSDST
DOT CONT
VSY
HSY
IC101
NJM2903V
IC103
TC74VHCT08AFT
SYNC SEPARATOR
IC303
BA7071F
EW, ES/RD, ES/RC
X601
CSS1436
(4.19MHz)
MONITOR
MICRO COMPUTER
IC602
PE5230A
CN601
BZ601
CPV1042
D602
MA152WK
Q602
DTC114EK
Q603
DTC114EK
S-80734ANDYI
IC603
CN701
CN252
CN1702
I
CN251
CN1701
I
IC251
IC252
DVD MICRO COMPUTER
PE5285A
IC701
R713 | R714 | MODEL
33K | 11K | UC
22K | 22K | EW
47K | NM | ES/RD
11K | 33K | ES/RC
X701
CSS1542
(12.582912MHz)
SYS +8V REG.
IMD2A
Q14
Q15
2SD1767
DVD 5.0V/2A
IC13
BP5250-1
CN651
F
CN1901
ILMGND
GND

A

A-b


CN202
A CONTROL PCB
Control Unit
Consists of
Control PCB
Photo PCB
Extention PCB
AV BUS CONNECTOR
CN402
1 COMP GND
2 COMP
3 IP_SEL2
4 IP_SEL1
5 AV_ON
6 LED_V
7 GND
8 REMIN
9 NEW AV SENS
NJM2235V
SW1 L H L/H
SW2 L L H
OUT V1 V2 V3
IC307 NJM2235V
IC309 NJM2235V
IC306 NJM2233BM
IC305 NJM2233BM
IC304 NJM2267V
IC308 NJM2267V
REFLECTION MUTE
+6dBAMP
NAVI SENSE
CN401
16 V.OUT
15 REAR V
14 V.OUT_G
13 REAR V_G
12 V.IN_G
11 V.IN
10 REAR L_G
9 REAR R_G
8 REAR L
7 REAR R
6 P.B.
5 NC
4 NC
3 ILM
2 GND
1 B.U.
1K(1/2W)
REARMUTE
VIDEO +5V REG.
MS2 output : 1.125V→1.0V
IC501 NJM2068MD
IC502 BA3131FS
CN801
IP-OUT
CN802
IP-IN
IC801 TA2050F
IC802 HA12187FP
CN851
OPT-OUT
IC851 TC7WT125FU
VF : 1.8-2.1V
IF : 8-13mA
DAC +5V REG.
DVD +8V REG.
VDD REG.
VIDEO +9V REG.
IC15 BA00ASFP
VR1 470(B) CCP1388
A B C D

:The power supply is shown with the marked box.

NOTE :

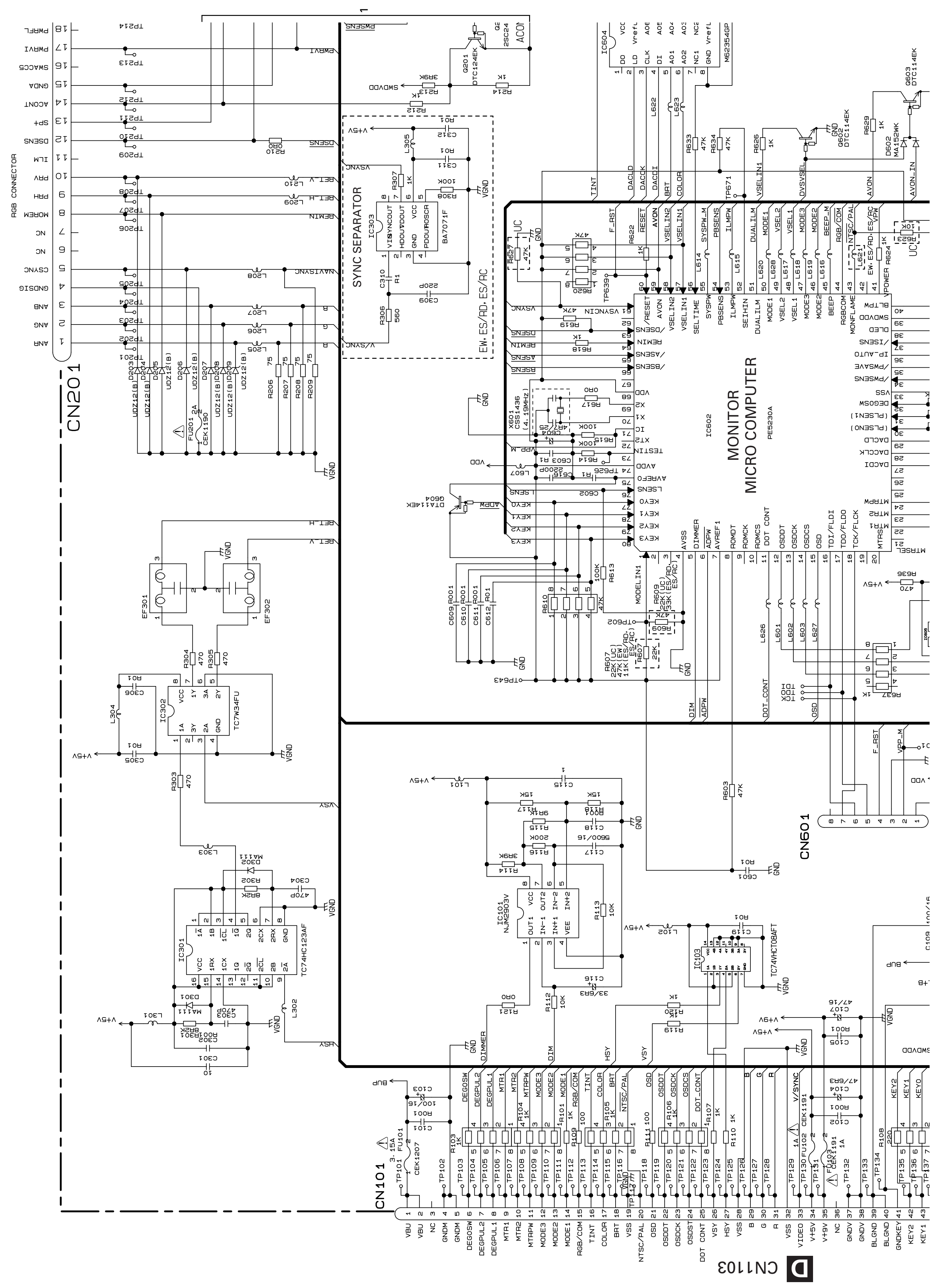
- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as :
2.2→2R2
0.022→R022

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

A

A

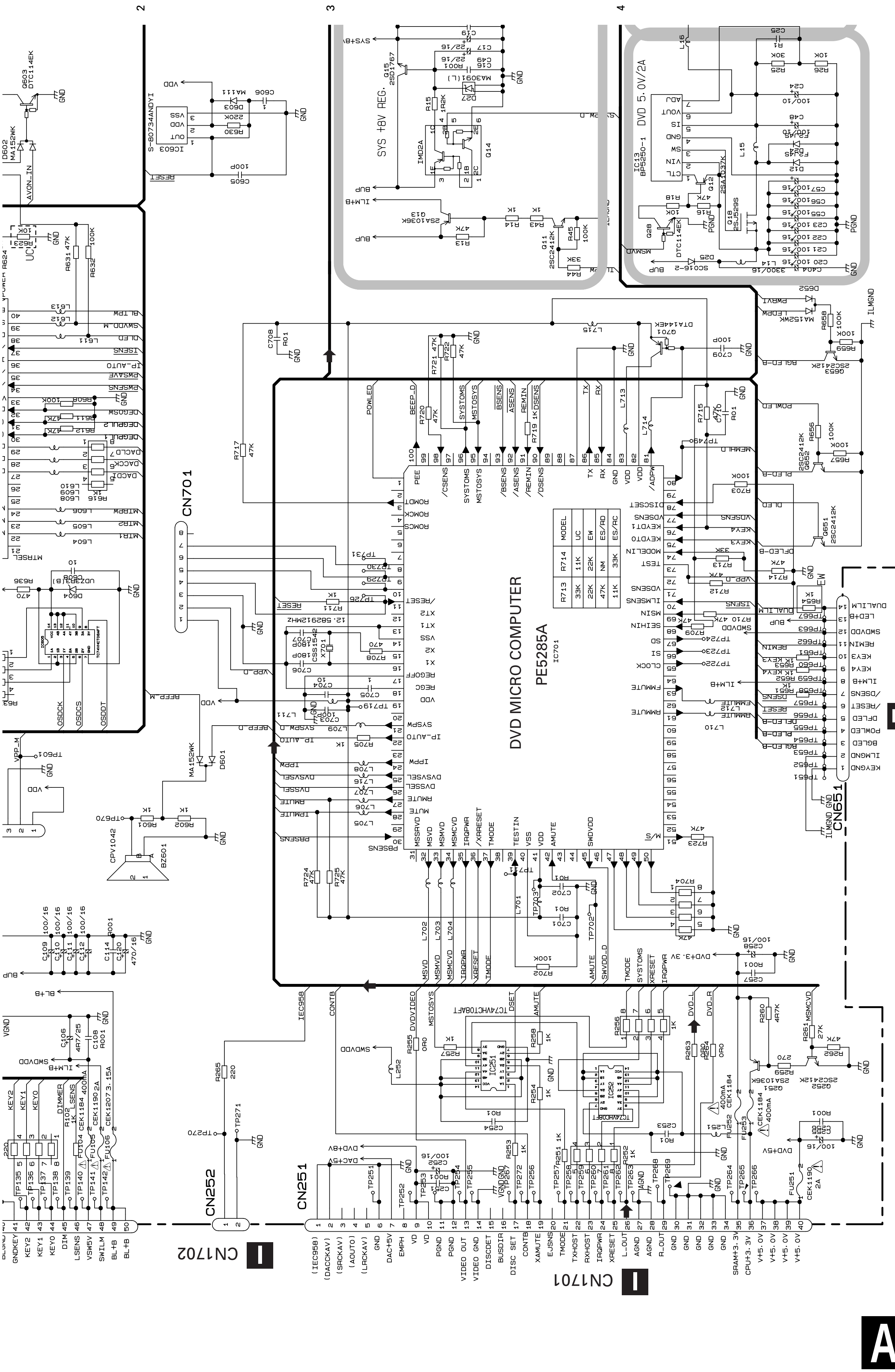

CN201
RGB CONNECTOR
PWRFL
PWRVI
SWACCS
GNDA
ACONT
SP+
DSENS
ILM
PRV
PRH
MOREM
NC
CSYNC
GNDSIG
ANB
ANG
ANR
SYNC SEPARATOR
IC303
BA7071F
EW, ES/RD, ES/RC
IC302
TC7W34FU
EF301
EF302
IC301
TC74HC123AF
IC101
NJM2903V
IC103
TC74VHCT08AFT
IC602
MONITOR
MICRO COMPUTER
PE5230A
IC604
M62354GP
X601
CSS1436
(4.19MHz)
Q201
DTC124EK
Q602
DTC114EK
Q603
DTC114EK
Q604
DTA114EK
D602
MA152WK
FU101
CEK1207
3.15A
FU102
CEK1191
1A
FU201
CEK1190
2A
FU103
CEK1191
1A
CN101
CN601
CN1103
D
V+5V
VGND
GND
VDD
BUP
SWDVDD
VBU
NC
GNDM
DEGOSW
DEGPUL2
DEGPUL1
MTR1
MTR2
MTRPW
MODE3
MODE2
MODE1
RGB/COM
TINT
COLOR
BRT
VSS
NTSC/PAL
OSD
OSDDT
OSDCK
OSDCS
DOT CONT
VSY
HSY
B
G
R
VIDEO
V+9V
GNDV
BLGND
GNDKEY
KEY2
KEY1

B

C

D

A-a A-b

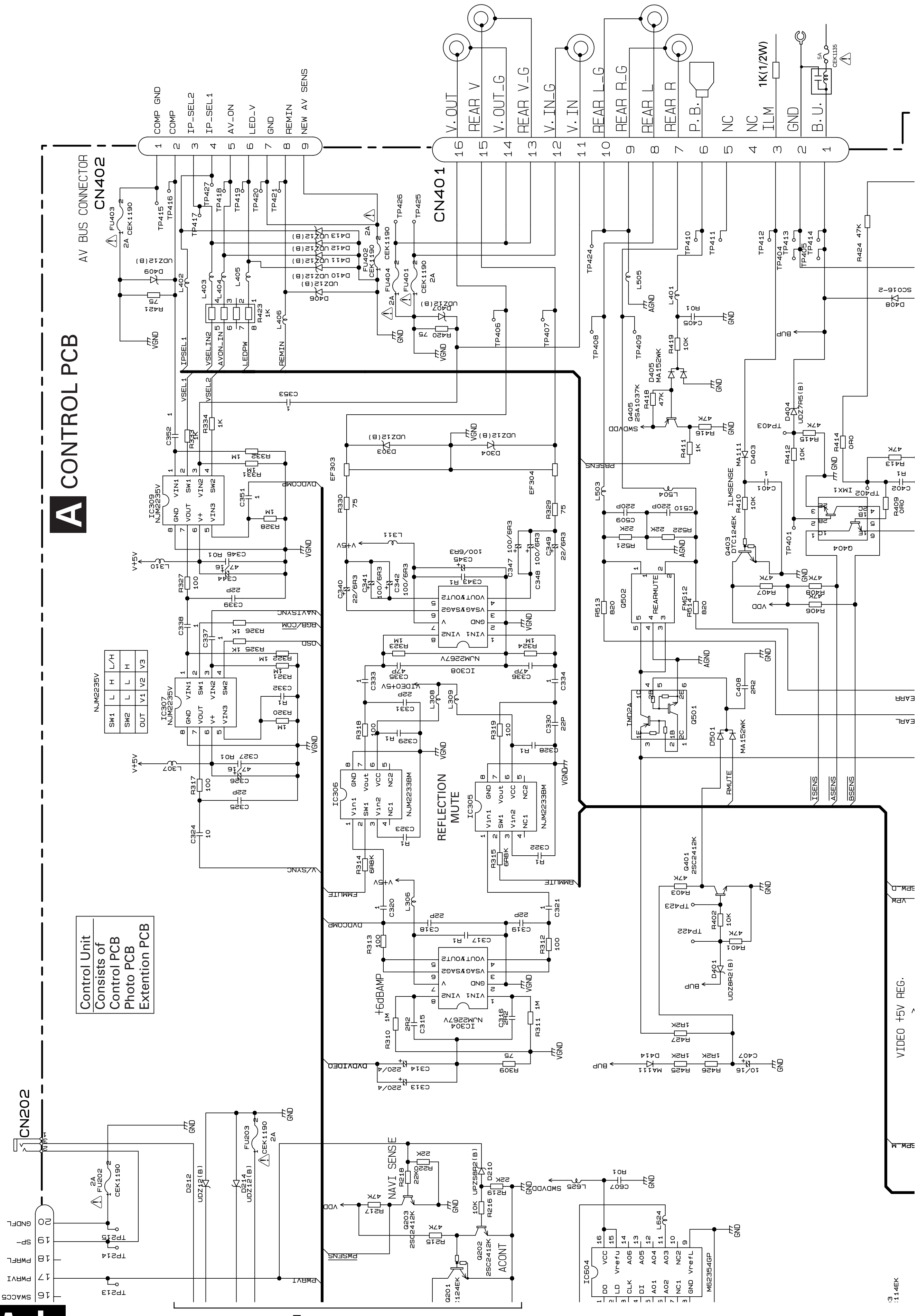

DVD MICRO COMPUTER
PE5285A
IC701
CN701
CN1901
CN651
CN1701
CN1702
CN251
CN252
SYS +8V REG.
DVD 5.0V/2A
IC13 BP5250-1
IC603 S-80734ANDYI
IC251 TC74VHCT08AFT
IC252 TC74VHCT08AFT
BZ601 CPV1042
F
I

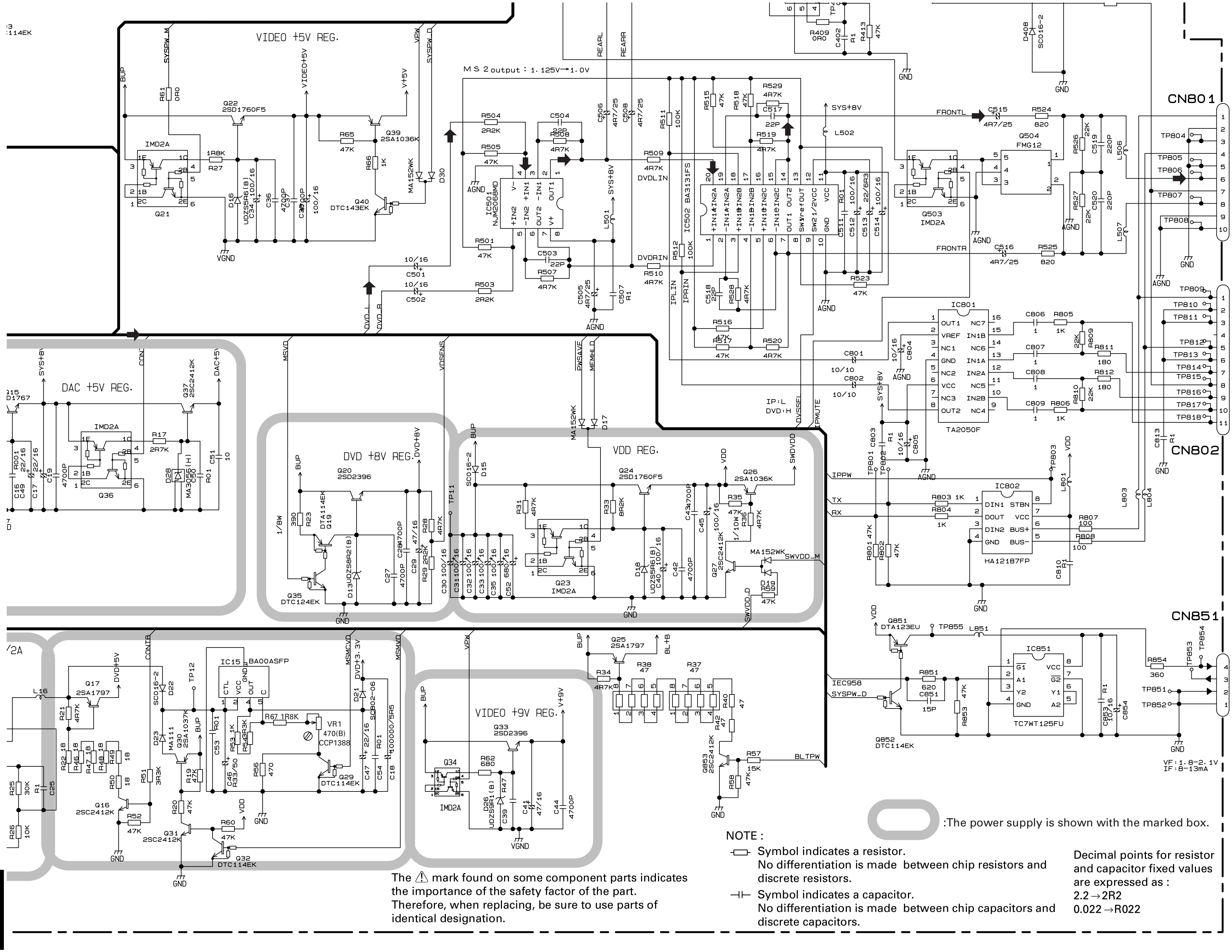
MODEL	R714	R713
UC	11K	33K
EW	22K	22K
ES/RD	NM	47K
ES/RC	33K	11K

A B C D

A-a A-b

A B C D


A CONTROL PCB
CN402
AV BUS CONNECTOR
CN401
CN202
COMP GND
COMP
IP_SEL2
IP_SEL1
AV_ON
LED_V
GND
REMIN
NEW AV SENS
V.OUT
REAR V
V.OUT_G
REAR V_G
V.IN_G
V.IN
REAR L_G
REAR R_G
REAR L
REAR R
P.B.
NC
NC
ILM
GND
B.U.
1K(1/2W)
IC309 NJM2235V
IC307 NJM2235V
IC308 NJM2267V
IC304 NJM2267V
IC306 NJM2233BM
IC305 NJM2233BM
REFLECTION MUTE
+6dBAMP
Q502 REARMUTE FMG12
IMD2A
Q501
Q401 2SC2412K
Q403 DTC124EK
Q404 IMX1
Q405 2SA1037K
Q202 2SC2412K
Q203 2SC2412K
NAVI SENSE
ACONT
IC604 M62354GP
VIDEO +5V REG.
NJM2235V
SW1 L L H
SW2 L H L
OUT V1 V2 V3
L/H H L
Control Unit
Consists of
Control PCB
Photo PCB
Extention PCB
GNDFL 20
SP- 19
PWRFL 18
PWRVI 17
SWACCS 16


VIDEO +5V REG.
DAC +5V REG.
DVD +8V REG.
VDD REG.
VIDEO +9V REG.
M S 2 output : 1.125V→1.0V
IP-OUT
IP-IN
OPT-OUT
CN801
CN802
CN851
IC501 NJM2068MD
IC502 BA3131FS
IC801 TA2050F
IC802 HA12187FP
IC851 TC7WT125FU
IC15 BA00ASFP
Q504 FMG12
Q503 IMD2A
IP:L DVD:H
VF:1.8-2.1V IF:8-13mA
A-a
A-b

:The power supply is shown with the marked box.

NOTE :

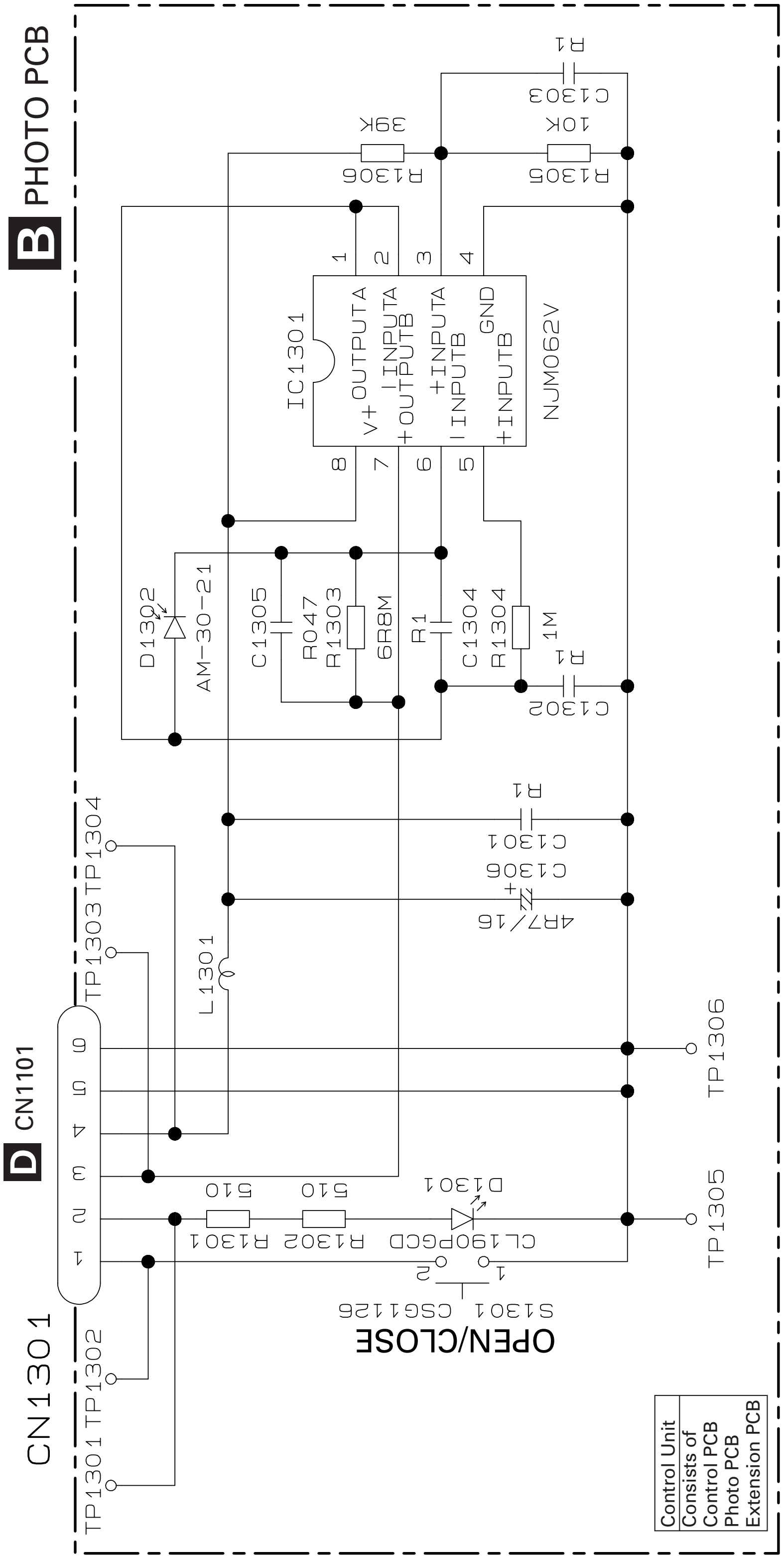
▭ Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

⊣⊢ Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

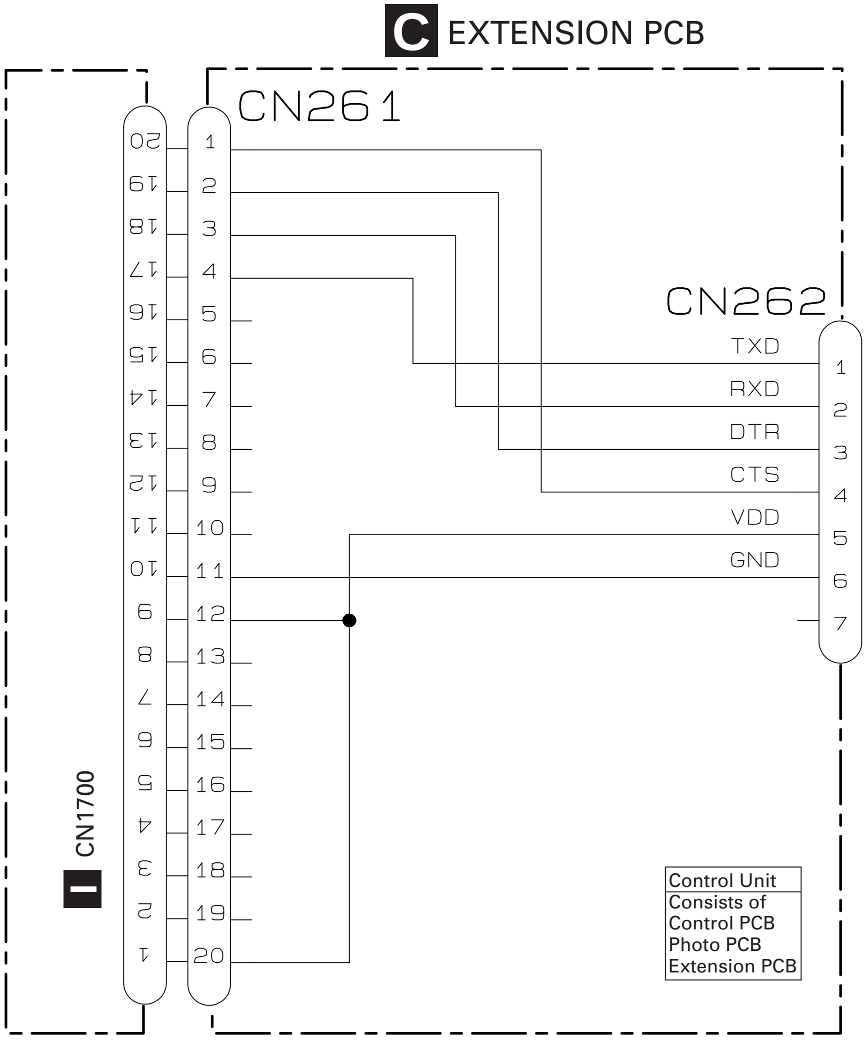
Decimal points for resistor and capacitor fixed values are expressed as :
2.2 → 2R2
0.022 → R022

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

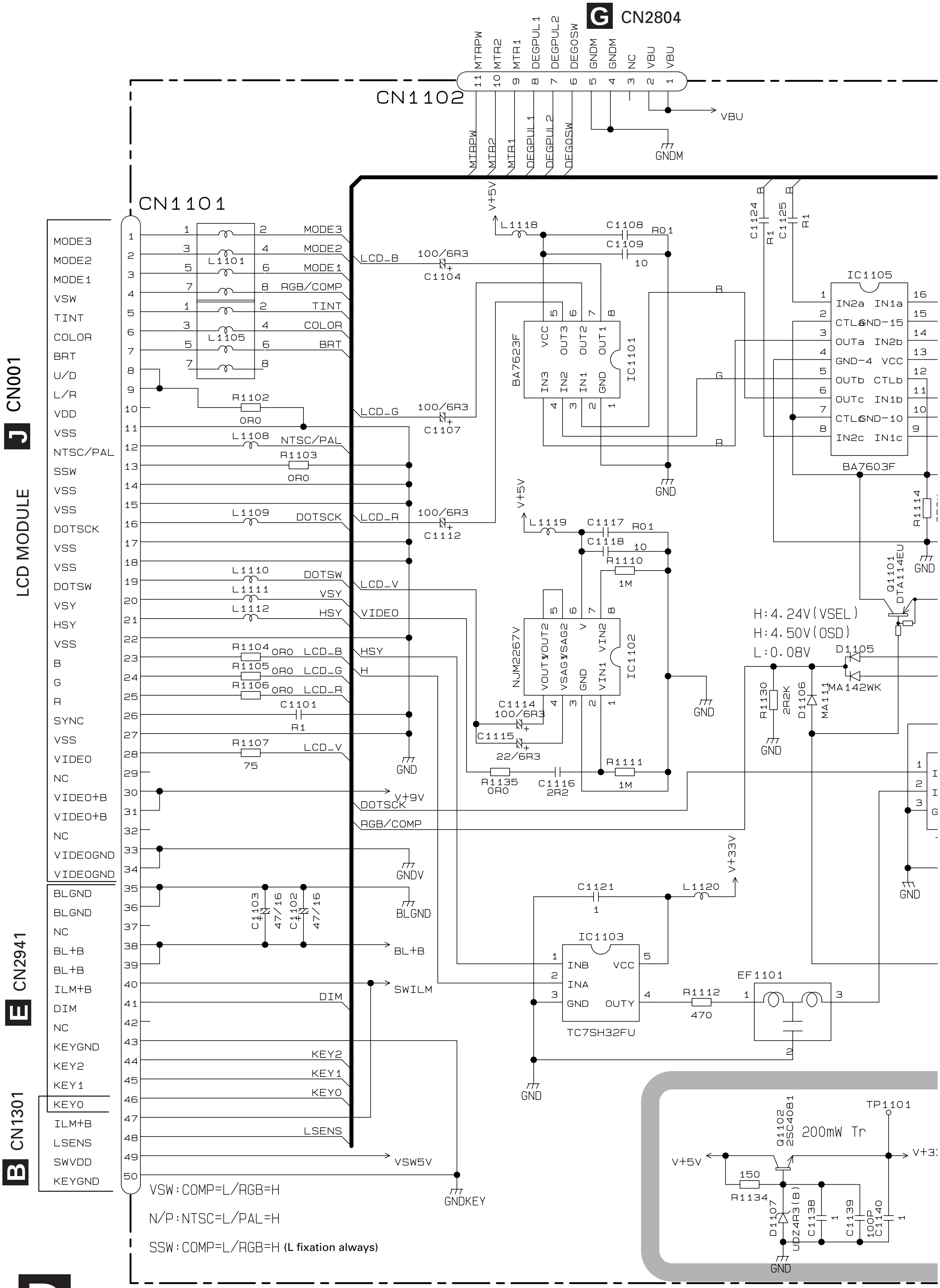
3.3 PHOTO PCB


B PHOTO PCB
IC1301
NJM062V
V+
OUTPUTA
-INPUTA
+INPUTA
GND
+OUTPUTB
-INPUTB
+INPUTB
1
2
3
4
5
6
7
8
R1306
39K
R1305
10K
C1303
R1
D1302
AM-30-21
C1305
R047
R1303
6R8M
C1304
R1
R1304
1M
C1302
R1
C1301
R1
C1306
4R7/16
L1301
TP1301
TP1302
TP1303
TP1304
TP1305
TP1306
D CN1101
CN1301
R1301
510
R1302
510
D1301
CL190PGCD
S1301 CSG1126
OPEN/CLOSE
Control Unit
Consists of
Control PCB
Photo PCB
Extension PCB

3.4 EXTENSION PCB


C EXTENSION PCB
CN261
CN262
CN1700
I
TXD
RXD
DTR
CTS
VDD
GND
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Control Unit
Consists of
Control PCB
Photo PCB
Extension PCB

3.5 RELAY UNIT

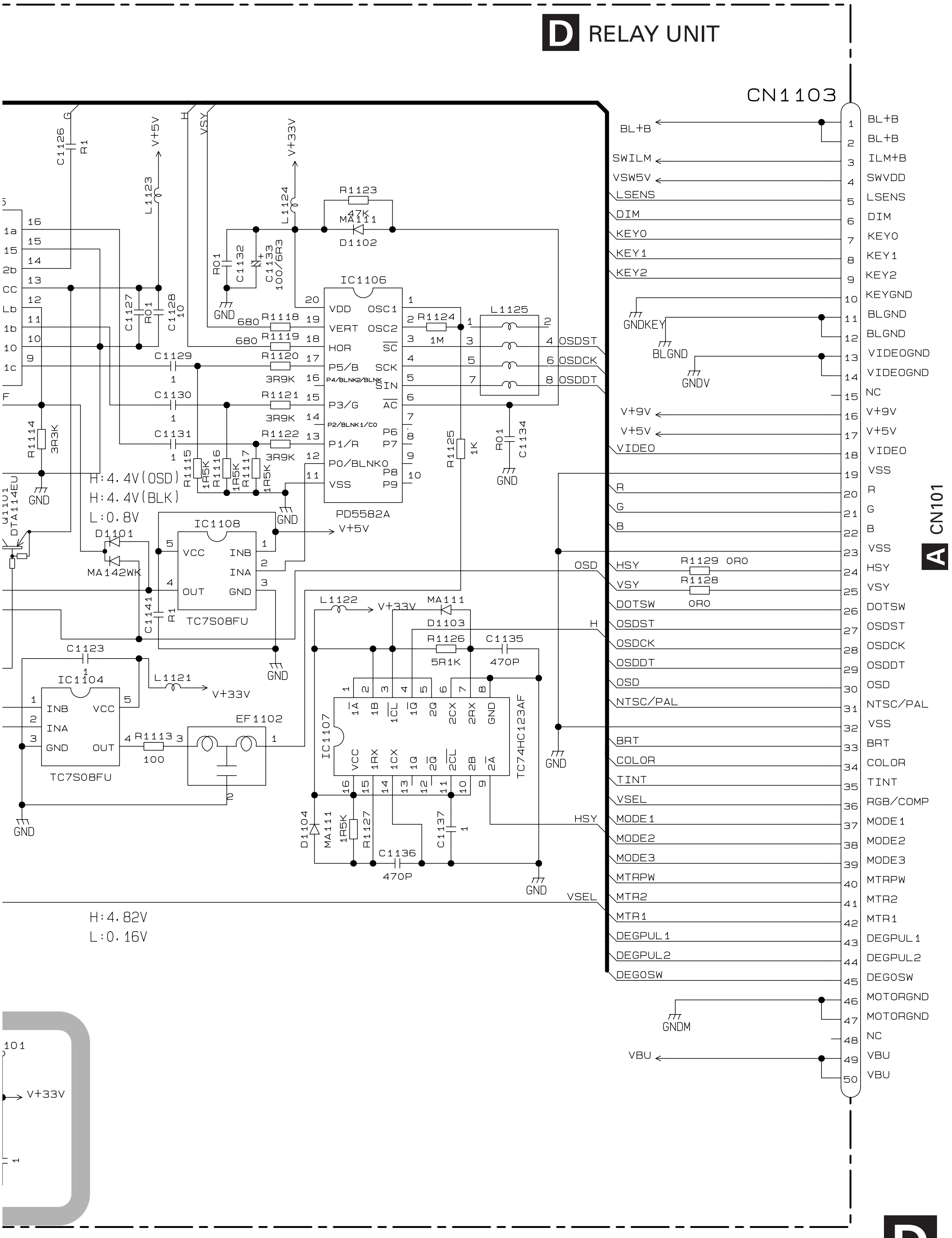

G CN2804
CN1102
MTRPW
MTR2
MTR1
DEGPUL1
DEGPUL2
DEGOSW
GNDM
NC
VBU
VBU
GNDM
CN1101
J CN001
LCD MODULE
MODE3
MODE2
MODE1
VSW
TINT
COLOR
BRT
U/D
L/R
VDD
VSS
NTSC/PAL
SSW
DOTSCK
DOTSW
VSY
HSY
B
G
R
SYNC
VIDEO
NC
VIDEO+B
VIDEOGND
BLGND
BL+B
ILM+B
DIM
KEYGND
KEY2
KEY1
KEY0
LSENS
SWVDD
E CN2941
B CN1301
L1101
L1105
RGB/COMP
R1102
0R0
L1108
R1103
L1109
L1110
L1111
L1112
R1104
R1105
R1106
C1101
R1
R1107
75
LCD_B
LCD_G
LCD_R
LCD_V
VIDEO
HSY
H
V+9V
DOTSCK
GNDV
BLGND
BL+B
SWILM
VSW5V
GNDKEY
C1103
C1102
47/16
100/6R3
C1104
C1107
C1112
V+5V
L1118
C1108
C1109
R01
10
IC1101
BA7623F
VCC
OUT3
OUT2
OUT1
IN3
IN2
IN1
GND
C1124
C1125
IC1105
BA7603F
IN2a
IN1a
CTLa
GND-15
OUTa
IN2b
GND-4
VCC
OUTb
CTLb
OUTc
IN1b
CTLc
GND-10
IN2c
IN1c
R1114
Q1101
DTA114EU
L1119
C1117
C1118
R1110
1M
IC1102
NJM2267V
VOUT2
VSAG2
V
VIN2
VOUT1
VSAG1
VIN1
C1114
C1115
22/6R3
R1135
C1116
2R2
R1111
H:4.24V(VSEL)
H:4.50V(OSD)
L:0.08V
D1105
MA142WK
R1130
2R2K
D1106
MA111
V+33V
C1121
L1120
IC1103
TC7SH32FU
INB
INA
VCC
OUTY
R1112
470
EF1101
GND
TP1101
Q1102
2SC4081
200mW Tr
V+5V
150
R1134
D1107
UDZ4R3(B)
C1138
C1139
C1140
100P

VSW:COMP=L/RGB=H

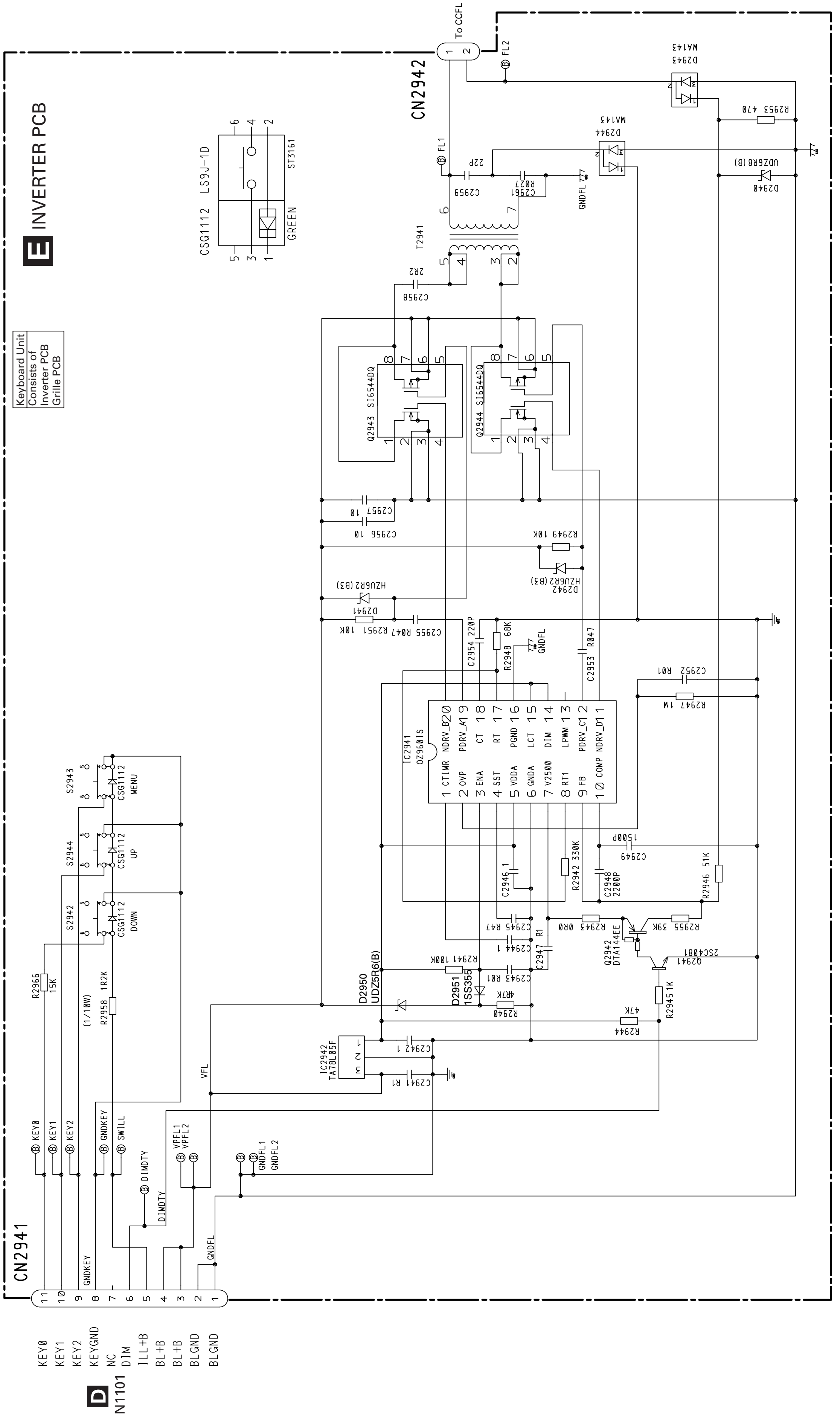
N/P:NTSC=L/PAL=H

SSW:COMP=L/RGB=H (L fixation always)

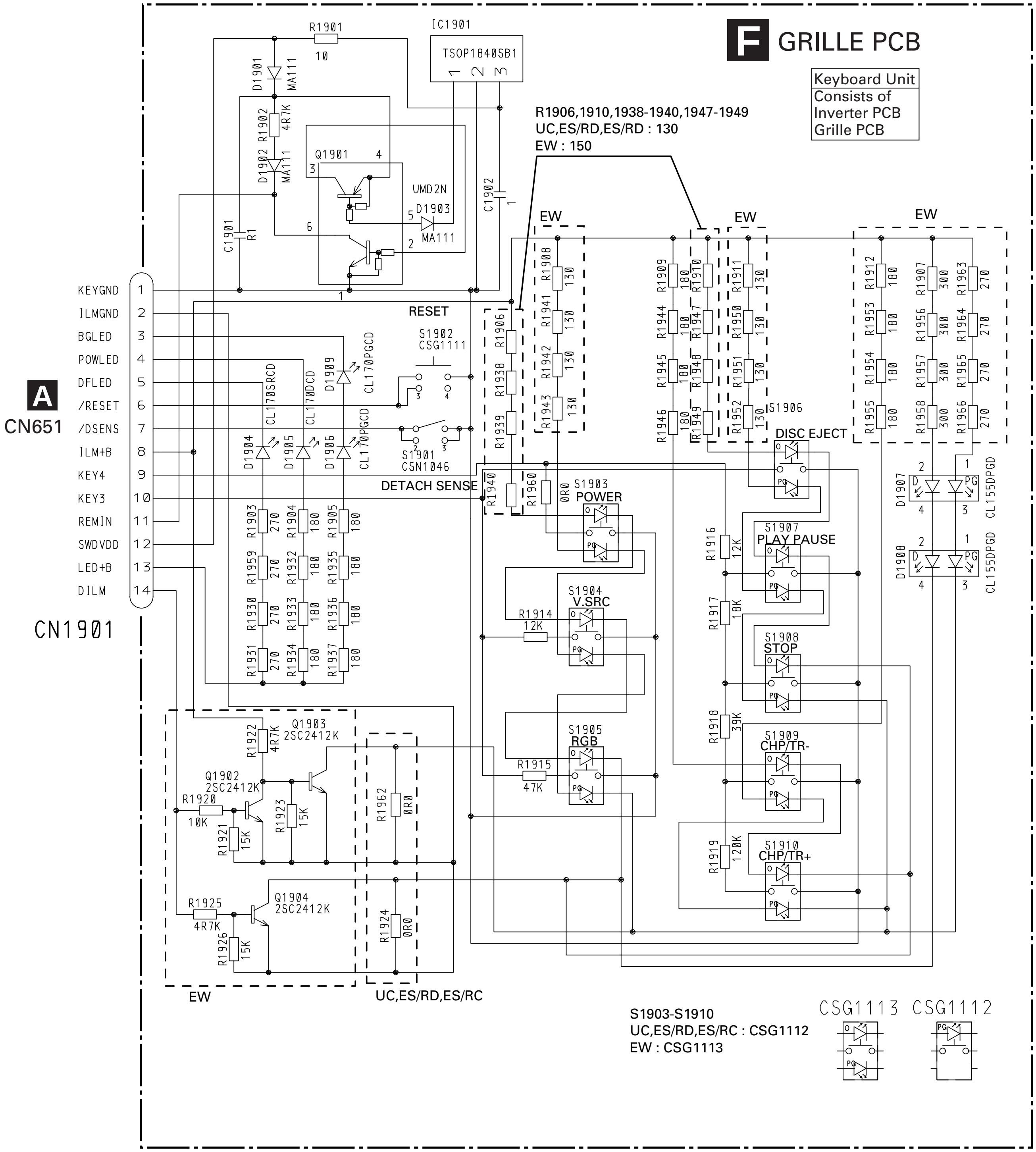
D RELAY UNIT


CN1103
CN101
A
1 BL+B
2 BL+B
3 ILM+B
4 SWVDD
5 LSENS
6 DIM
7 KEY0
8 KEY1
9 KEY2
10 KEYGND
11 BLGND
12 BLGND
13 VIDEOGND
14 VIDEOGND
15 NC
16 V+9V
17 V+5V
18 VIDEO
19 VSS
20 R
21 G
22 B
23 VSS
24 HSY
25 VSY
26 DOTSW
27 OSDST
28 OSDCK
29 OSDDT
30 OSD
31 NTSC/PAL
32 VSS
33 BRT
34 COLOR
35 TINT
36 RGB/COMP
37 MODE1
38 MODE2
39 MODE3
40 MTRPW
41 MTR2
42 MTR1
43 DEGPUL1
44 DEGPUL2
45 DEGOSW
46 MOTORGND
47 MOTORGND
48 NC
49 VBU
50 VBU
BL+B
SWILM
VSW5V
LSENS
DIM
KEY0
KEY1
KEY2
GNDKEY
BLGND
GNDV
V+9V
V+5V
VIDEO
R
G
B
OSD
HSY
VSY
DOTSW
H
OSDST
OSDCK
OSDDT
OSD
NTSC/PAL
BRT
COLOR
TINT
VSEL
MODE1
MODE2
MODE3
MTRPW
MTR2
MTR1
DEGPUL1
DEGPUL2
DEGOSW
GNDM
VBU
R1129 0R0
R1128 0R0
IC1106
PD5582A
20 VDD
19 VERT
18 HOR
17 P5/B
16 P4/BLNK2/BLNK
15 P3/G
14 P2/BLNK1/CO
13 P1/R
12 P0/BLNK0
11 VSS
1 OSC1
2 OSC2
3 SC
4 SCK
5 SIN
6 AC
7
8 P6
9 P7
10 P8 P9
R1123 47K
MA111
D1102
L1124
V+33V
L1123
V+5V
VSY
C1126
R1
R01
C1132
C1133 100/6R3
GND
R1118 680
R1119 680
R1120 3R9K
R1121 3R9K
R1122 3R9K
R1124 1M
L1125
4 OSDST
6 OSDCK
8 OSDDT
R1125 1K
R01
C1134
GND
C1127
R01
C1128 10
C1129 1
C1130 1
C1131 1
R1114 3R3K
GND
Q1101 DTA114EU
R1115 1R5K
R1116 1R5K
R1117 1R5K
GND
V+5V
H:4.4V(OSD)
H:4.4V(BLK)
L:0.8V
D1101
MA142WK
IC1108
TC7S08FU
5 VCC
1 INB
2 INA
4 OUT
3 GND
C1141
R1
GND
C1123 1
IC1104
TC7S08FU
1 INB
2 INA
3 GND
5 VCC
4 OUT
L1121
V+33V
R1113 100
EF1102
GND
L1122
V+33V
MA111
D1103
R1126 5R1K
C1135 470P
IC1107
TC74HC123AF
1 1A
2 1B
3 1CL
4 1Q
5 2Q
6 2CX
7 2RX
8 GND
16 VCC
15 1RX
14 1CX
13 1Q
12 2Q
11 2CL
10 2B
9 2A
D1104 MA111
R1127 1R5K
C1136 470P
C1137 1
GND
GND
H:4.82V
L:0.16V
101
V+33V

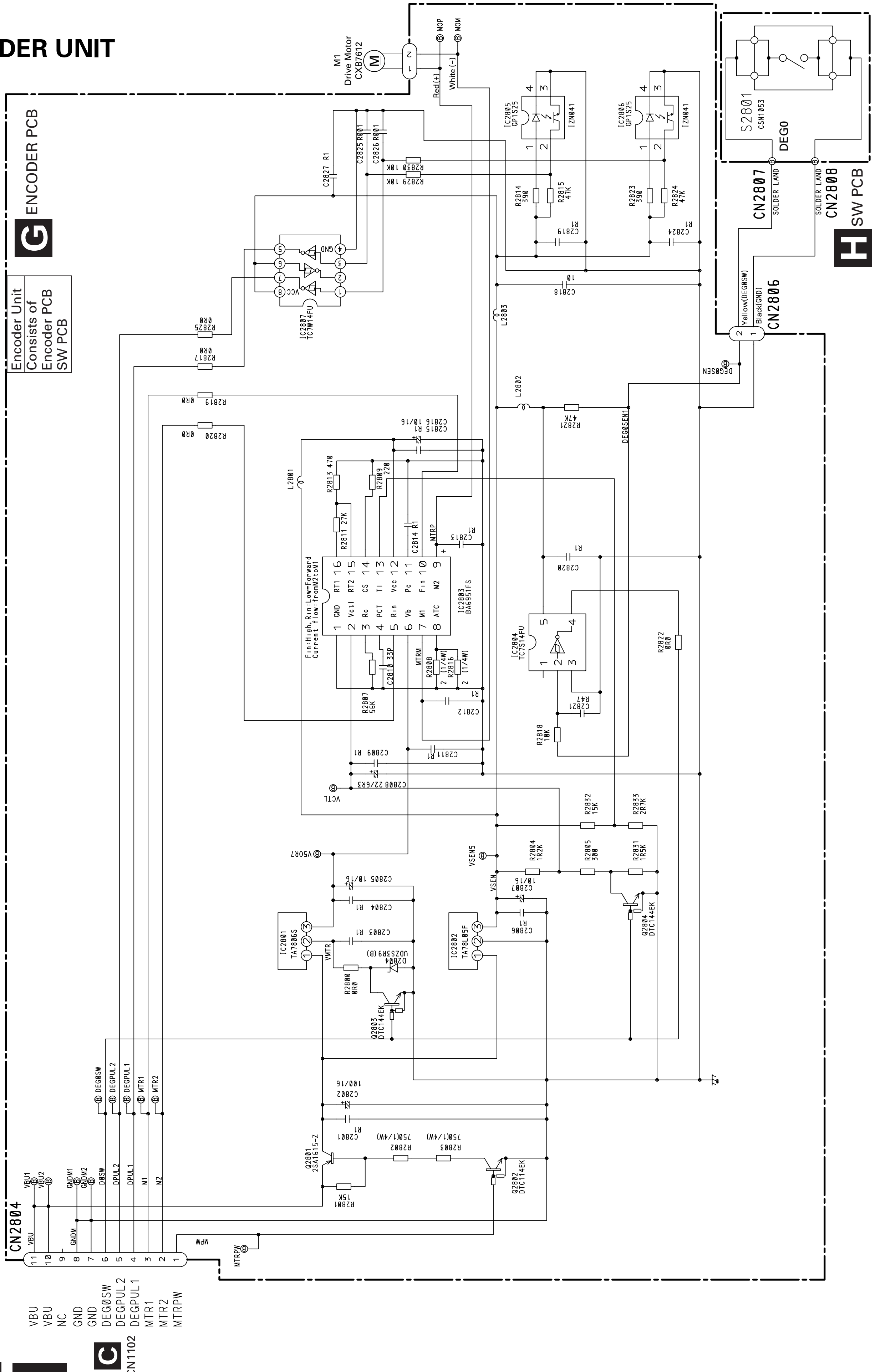
3.6 INVERTER PCB


E INVERTER PCB
Keyboard Unit
Consists of
Inverter PCB
Grille PCB
To CCFL
CN2942
FL1
FL2
D2943 MA143
D2944 MA143
R2953 470
D2940 UDZ6R8(B)
GNDFL
C2959 22P
C2961 R027
T2941
C2958 2R2
Q2943 SI6544DQ
Q2944 SI6544DQ
C2957 10
C2956 10
R2949 10K
D2942 HZU6R2(B3)
D2941 HZU6R2(B3)
R2951 10K
C2955 R047
C2954 220P
R2948 68K
C2953 R047
C2952 R01
R2947 1M
IC2941 OZ9601S
1 CTIMR
2 OVP
3 ENA
4 SST
5 VDDA
6 GNDA
7 V2500
8 RT1
9 FB
10 COMP
11 NDRV_D1
12 PDRV_C1
13 LPWM
14 DIM
15 LCT
16 PGND
17 RT
18 CT
19 PDRV_A1
20 NDRV_B2
C2949 1500P
R2942 330K
C2946 1
C2948 2200P
R2946 51K
C2945 R47
R2943 0R0
R2955 39K
C2944 1
C2947 R1
Q2942 DTA144EE
Q2941 2SC4081
R2941 100K
C2943 R01
D2951 1SS355
D2950 UDZ5R6(B)
R2940 4R7K
R2944 47K
R2945 1K
IC2942 TA78L05F
C2942 1
C2941 R1
VFL
CSG1112 LS9J-1D ST3161 GREEN
S2943 CSG1112 MENU
S2944 CSG1112 UP
S2942 CSG1112 DOWN
R2966 15K
R2958 1R2K (1/10W)
KEY0
KEY1
KEY2
GNDKEY
SWILL
DIMDTY
VPFL1
VPFL2
GNDFL1
GNDFL2
CN2941
11 KEY0
10 KEY1
9 KEY2
8 KEYGND
7 NC
6 DIM
5 ILL+B
4 BL+B
3 BL+B
2 BLGND
1 BLGND
D CN1101

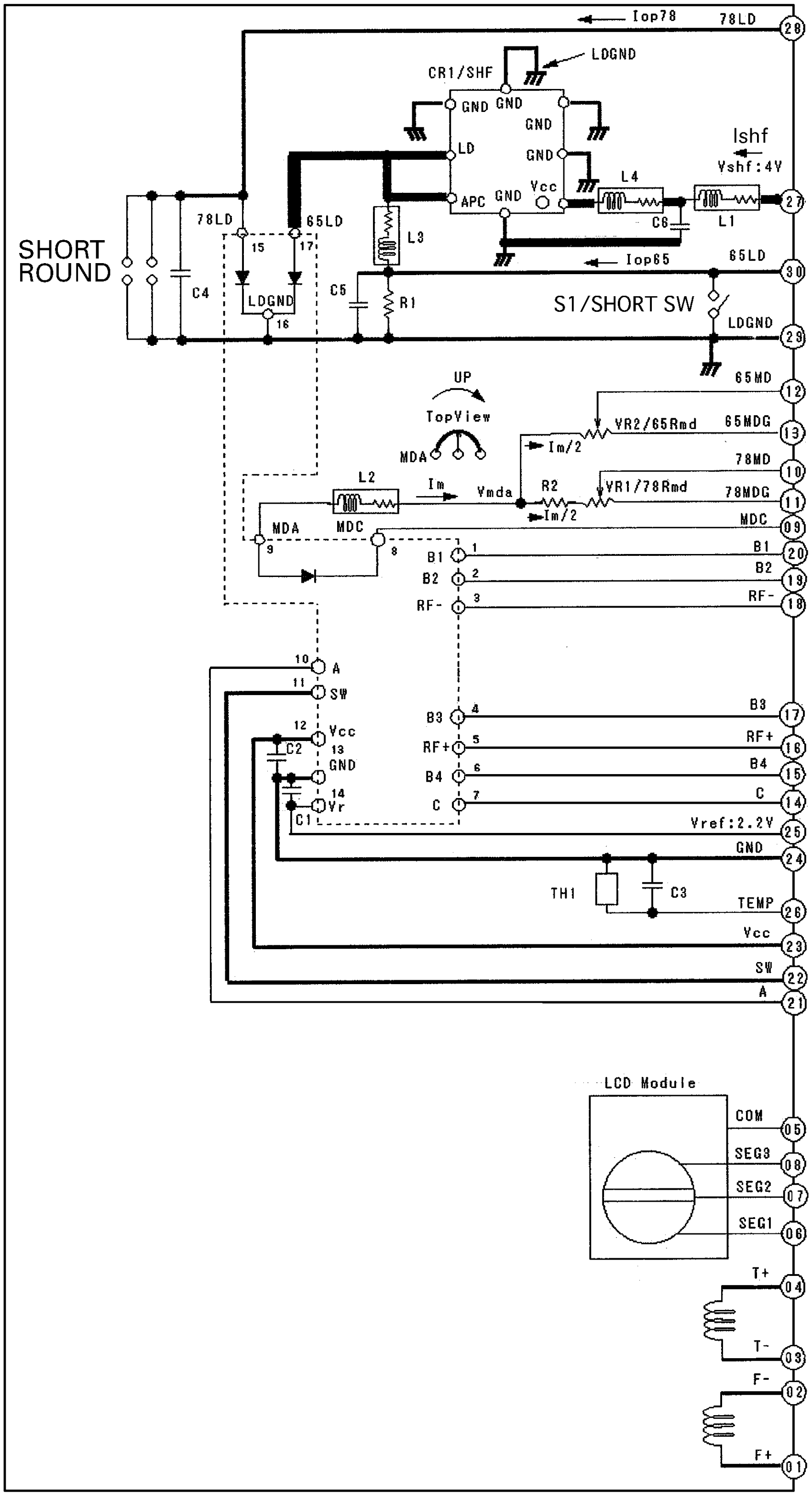
3.7GRILLE PCB


F GRILLE PCB
Keyboard Unit
Consists of
Inverter PCB
Grille PCB
R1906,1910,1938-1940,1947-1949
UC,ES/RD,ES/RD : 130
EW : 150
A
CN651
KEYGND 1
ILMGND 2
BGLED 3
POWLED 4
DFLED 5
/RESET 6
/DSENS 7
ILM+B 8
KEY4 9
KEY3 10
REMIN 11
SWDVDD 12
LED+B 13
DILM 14
CN1901
R1901 10
IC1901 TSOP1840SB1
D1901 MA111
R1902 4R7K
D1902 MA111
Q1901 UMD2N
D1903 MA111
C1901 R1
C1902 1
RESET
S1902 CSG1111
S1901 CSN1046
DETACH SENSE
D1909 CL170PGCD
D1904 CL170SRCD
D1905 CL170DCD
D1906 CL170PGCD
R1903 270
R1904 180
R1905 180
R1959 270
R1932 180
R1935 180
R1930 270
R1933 180
R1936 180
R1931 270
R1934 180
R1937 180
R1906
R1938
R1939
R1940
R1960 0R0
EW
R1908 130
R1941 130
R1942 130
R1943 130
R1909 180
R1944 180
R1945 180
R1946 180
R1910
R1947
R1948
R1949
R1911 130
R1950 130
R1951 130
R1952 130
R1912 180
R1953 180
R1954 180
R1955 180
R1907 300
R1956 300
R1957 300
R1958 300
R1963 270
R1964 270
R1965 270
R1966 270
S1906 DISC EJECT
S1903 POWER
S1904 V.SRC
S1905 RGB
S1907 PLAY PAUSE
S1908 STOP
S1909 CHP/TR-
S1910 CHP/TR+
R1914 12K
R1915 47K
R1916 12K
R1917 18K
R1918 39K
R1919 120K
D1907 CL155DPGD
D1908 CL155DPGD
Q1903 2SC2412K
Q1902 2SC2412K
Q1904 2SC2412K
R1920 10K
R1921 15K
R1922 4R7K
R1923 15K
R1925 4R7K
R1926 15K
R1962 0R0
R1924 0R0
EW
UC,ES/RD,ES/RC
S1903-S1910
UC,ES/RD,ES/RC : CSG1112
EW : CSG1113
CSG1113 CSG1112

3.8 ENCODER UNIT

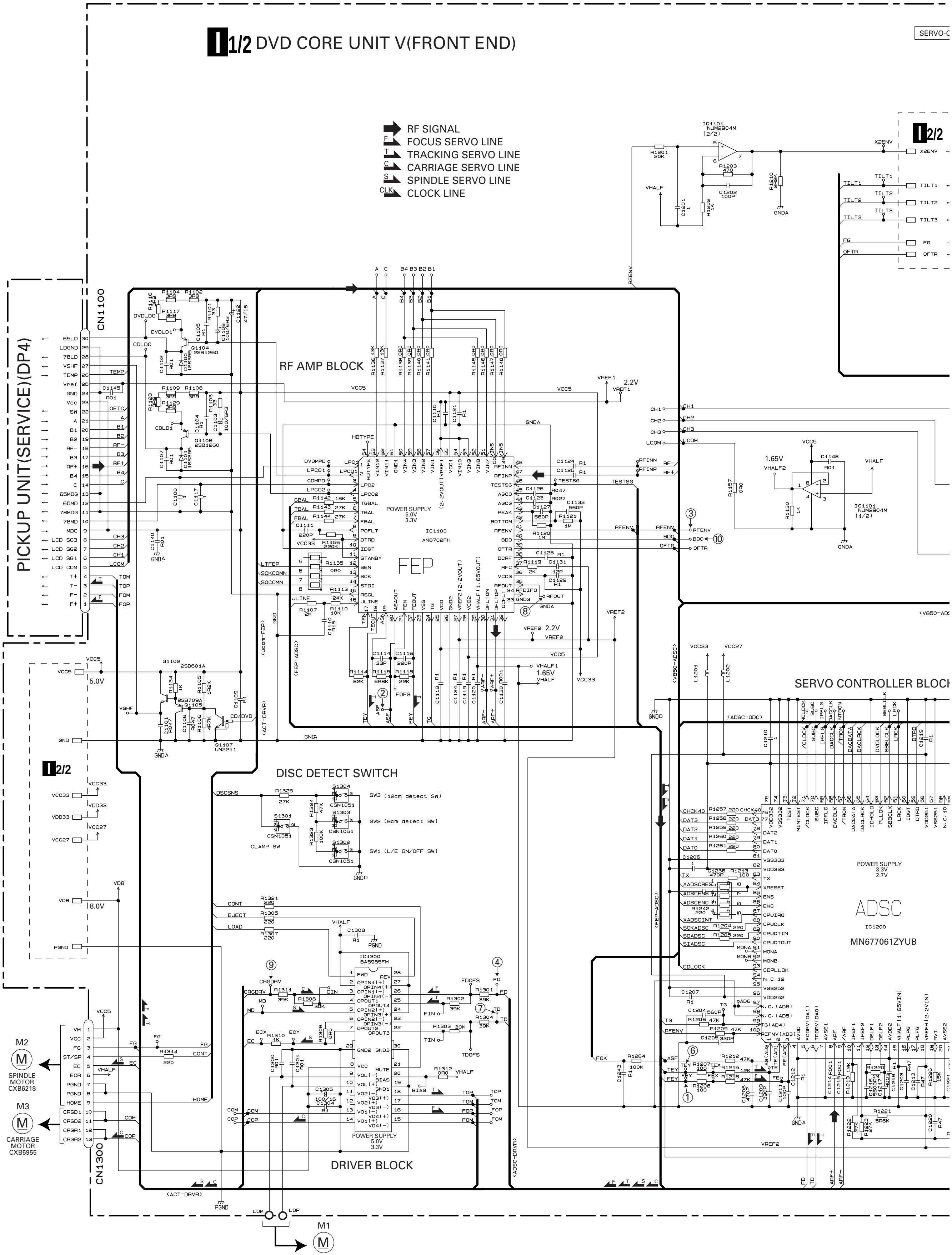

G ENCODER PCB
H SW PCB
Encoder Unit
Consists of
Encoder PCB
SW PCB
M1
Drive Motor
CXB7612
Red(+)
White(-)
MOP
MOM
IC2805
GP1S25
IC2806
GP1S25
IZN041
S2801
CSN1053
DEGO
CN2807
CN2808
SOLDER LAND
CN2806
Yellow(DEG0SW)
Black(GND)
DEG0SEN
DEG0SEN1
IC2807
TC7W14FU
GND
VCC
C2827 R1
C2825 R001
C2826 R001
R2830 10K
R2829 10K
R2814 390
R2815 47K
R2823 390
R2824 47K
C2819 R1
C2824 R1
C2818 10
L2803
L2802
R2821 47K
R2825 0R0
R2817 0R0
R2819 0R0
R2820 0R0
C2816 10/16
C2815 R1
L2801
R2813 470
R2809 220
R2811 27K
C2814 R1
MTRP
C2813 R1
IC2803
BA6951FS
GND
Vctl
Rc
PCT
Rin
Vb
M1
ATC
RT1
RT2
CS
TI
Vcc
Pc
Fin
M2
Fin:High,Rin:Low=Forward
Current flow:fromM2toM1
R2807 56K
C2810 33P
MTRM
R2808 (1/4W)
R2816 (1/4W)
C2812 R1
C2820 R1
IC2804
TC7S14FU
R2822 0R0
C2821 R47
R2818 10K
C2809 R1
C2811 R1
C2808 22/6R3
VCTL
R2832 15K
R2833 2R7K
R2804 1R2K
R2805 300
R2831 1R5K
VSEN5
VSEN
C2807 10/16
C2806 R1
Q2804
DTC144EK
VSOR7
C2805 10/16
C2804 R1
C2803 R1
IC2801
TA7806S
VMTR
D2804
UDZS3R9(B)
R2800 0R0
Q2803
DTC144EK
IC2802
TA78L05F
C2802 100/16
C2801 R1
R2802 750(1/4W)
R2803 750(1/4W)
Q2801
2SA1615-Z
Q2802
DTC114EK
R2801 15K
DEG0SW
DEGPUL2
DEGPUL1
MTR1
MTR2
MPW
MTRPW
VBU1
VBU2
GNDM1
GNDM2
D0SW
DPUL2
DPUL1
M1
M2
CN2804
VBU
GNDM
VBU
VBU
NC
GND
GND
DEG0SW
DEGPUL2
DEGPUL1
MTR1
MTR2
MTRPW
C
CN1102

3.9 PU UNIT(REFERENCE)

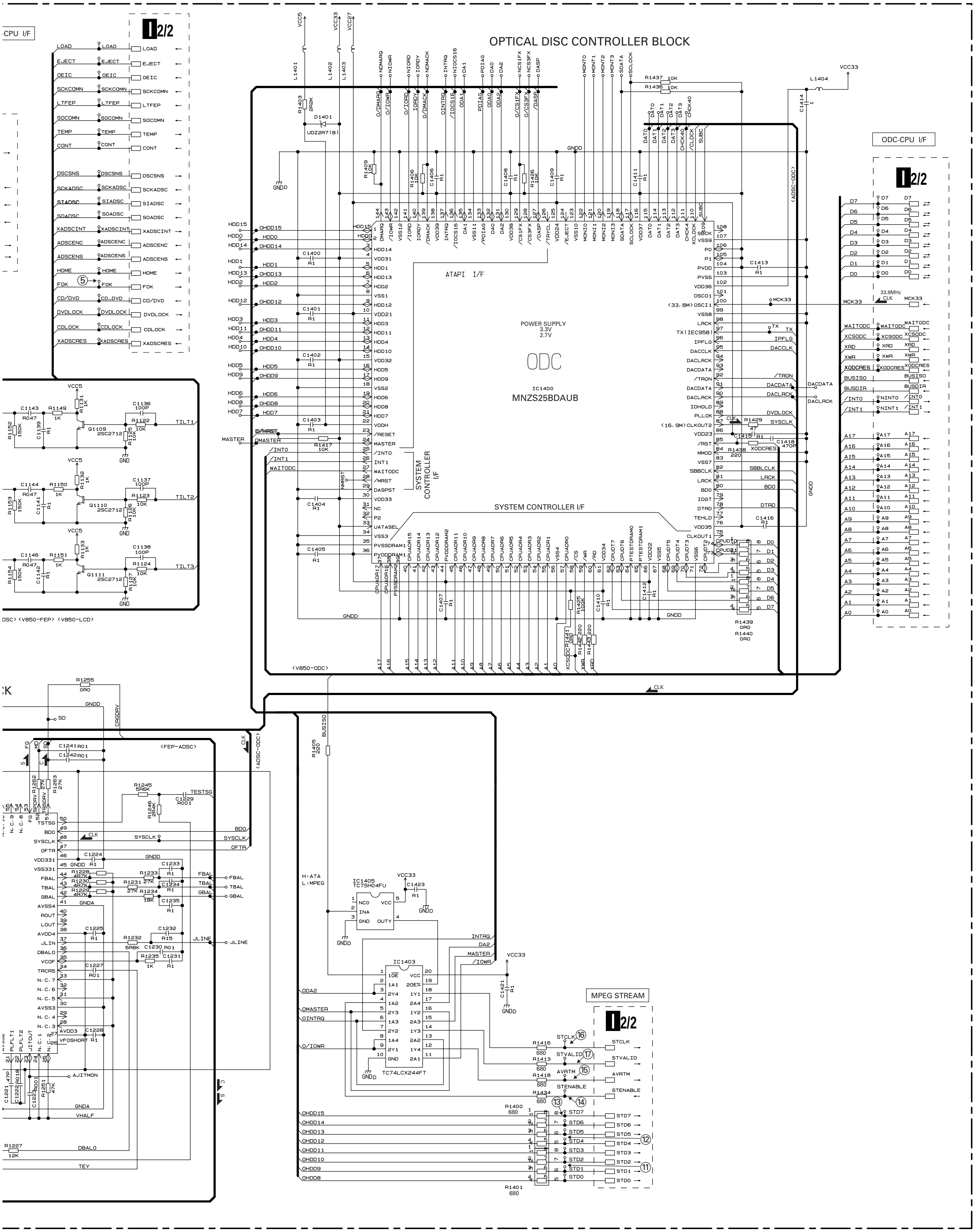

Iop78
78LD
28
LDGND
CR1/SHF
GND
GND
GND
GND
LD
APC
GND
Vcc
L4
Ishf
Vshf:4V
L1
C6
27
78LD
65LD
15
17
L3
SHORT ROUND
C4
LDGND
16
C5
R1
Iop65
65LD
30
S1/SHORT SW
LDGND
29
UP
TopView
MDA
65MD
12
VR2/65Rmd
65MDG
13
Im/2
78MD
10
L2
Im
Vmda
R2
VR1/78Rmd
78MDG
11
Im/2
MDA
MDC
MDC
09
9
8
B1
1
B1
20
B2
2
B2
19
RF-
3
RF-
18
10
A
11
SW
12
Vcc
C2
13
GND
14
Vr
C1
B3
4
B3
17
RF+
5
RF+
16
B4
6
B4
15
C
7
C
14
Vref:2.2V
25
GND
24
TH1
C3
TEMP
26
Vcc
23
SW
22
A
21
LCD Module
COM
05
SEG3
08
SEG2
07
SEG1
06
T+
04
T-
03
F-
02
F+
01

3.10 DVD MECHANISM MODULE(1/2)(GUIDE PAGE)

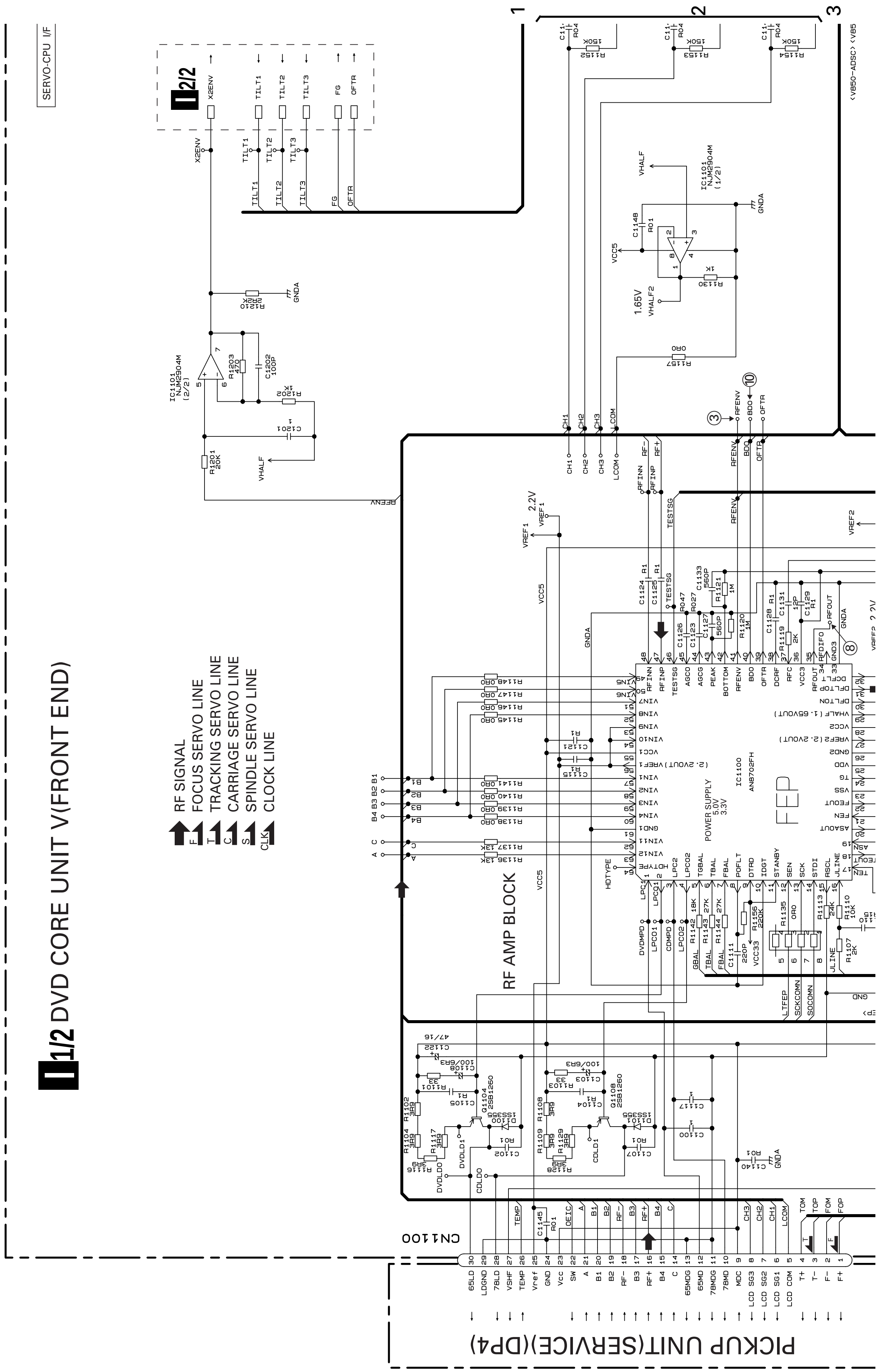
I-a 1/2

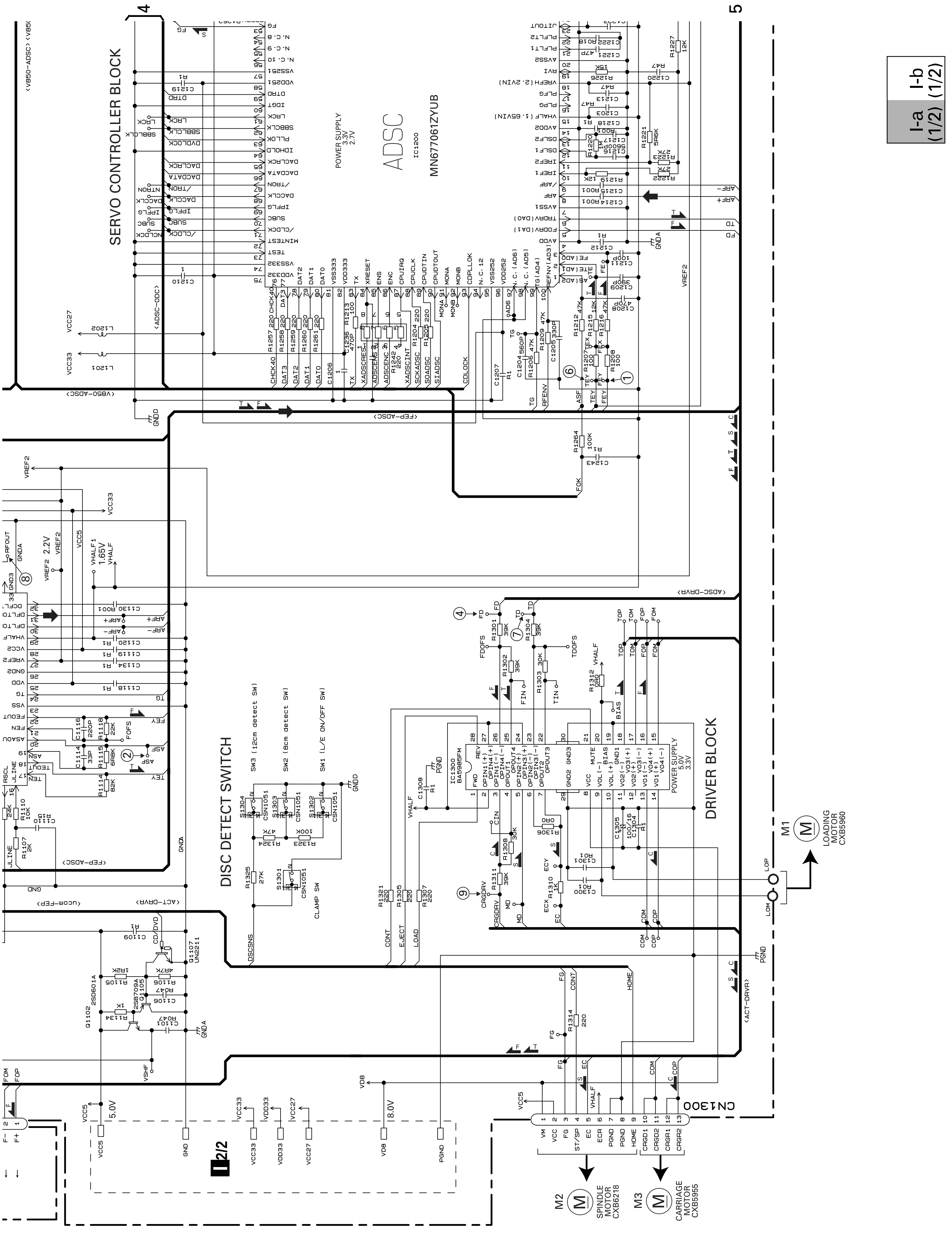

I 1/2 DVD CORE UNIT V(FRONT END)
SERVO-C
RF SIGNAL
F FOCUS SERVO LINE
T TRACKING SERVO LINE
C CARRIAGE SERVO LINE
S SPINDLE SERVO LINE
CLK CLOCK LINE
I 2/2
PICKUP UNIT(SERVICE)(DP4)
CN1100
RF AMP BLOCK
FEP
IC1100
AN8702FH
POWER SUPPLY
5.0V
3.3V
IC1101
NJM2904M
(2/2)
IC1101
NJM2904M
(1/2)
X2ENV
TILT1
TILT2
TILT3
FG
OFTR
VREF1 2.2V
VCC5
CH1
CH2
CH3
LCOM
RFINN
RFINP
RFENV
BDO
OFTR
TESTSG
1.65V
VHALF2
VHALF
VREF2 2.2V
VHALF1 1.65V
VCC33
VCC27
SERVO CONTROLLER BLOCK
ADSC
IC1200
MN677061ZYUB
POWER SUPPLY
3.3V
2.7V
Q1102
2SD601A
Q1105
2SB709A
Q1107
UN2211
Q1104
2SB1260
Q1108
2SB1260
VCC5 5.0V
GND
GNDA
I 2/2
VCC33
VDD33
VCC27
VD8 8.0V
PGND
DISC DETECT SWITCH
DSCSNS
SW3 (12cm detect SW)
SW2 (8cm detect SW)
SW1 (L/E ON/OFF SW)
CLAMP SW
CSN1051
CONT
EJECT
LOAD
IC1300
BA5985FM
POWER SUPPLY
5.0V
3.3V
DRIVER BLOCK
CN1300
M2
SPINDLE MOTOR
CXB6218
M3
CARRIAGE MOTOR
CXB5955
M1
LOADING MOTOR
CXB5960
LOM
LOP
<ACT-DRVR>
<FEP-ADSC>
<ucom-FEP>
<ADSC-DRVR>
<V850-ADSC>
<ADSC-ODC>
VREF2
① ② ③ ④ ⑥ ⑦ ⑧ ⑨ ⑩
A
B
C
D

I-b 1/2


OPTICAL DISC CONTROLLER BLOCK
CPU I/F
I 2/2
ODC-CPU I/F
I 2/2
ODC
IC1400
MNZS25BDAUB
POWER SUPPLY
3.3V
2.7V
ATAPI I/F
SYSTEM CONTROLLER I/F
SYSTEM CONTROLLER I/F
VCC5
VCC33
VCC27
GNDD
L1401
L1402
L1403
L1404
D1401
UDZ2R7(B)
R1437 10K
R1436 10K
33.8MHz CLK
MCK33
(V850-ODC)
(ADSC-ODC)
(FEP-ADSC)
(ADSC-ODC)
(V850-FEP) (V850-LCD)
Q1109 2SC2712
Q1110 2SC2712
Q1111 2SC2712
TILT1
TILT2
TILT3
IC1405
TC7SH04FU
IC1403
TC74LCX244FT
MPEG STREAM
I 2/2
STCLK
STVALID
AVRTM
STENABLE
STD7
STD6
STD5
STD4
STD3
STD2
STD1
STD0
R1400 680
R1401 680
H:ATA
L:MPEG
BUSISO
R1405 220
R1255 0R0
SD
CLK
TESTSG
FBAL
TBAL
GBAL
JLINE
DBAL0
TEY
VHALF
GNDA
AJITMON
R1227 12K
R1439 0R0
R1440 0R0

I-a (1/2)	I-b (1/2)


I 1/2 DVD CORE UNIT V(FRONT END)
RF AMP BLOCK
SERVO-CPU I/F
I 2/2
RF SIGNAL
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE
CLOCK LINE
IC1100
AN8702FH
FEP
POWER SUPPLY
5.0V
3.3V
IC1101
NJM2904M
(2/2)
IC1101
NJM2904M
(1/2)
CN1100
PICKUP UNIT(SERVICE)(DP4)
X2ENV
TILT1
TILT2
TILT3
FG
OFTR
VHALF
VHALF2
1.65V
2.2V
VREF1
VCC5
GNDA
Q1104
2SB1260
Q1108
2SB1260
D1100
1SS355
D1101
1SS355
65LD
LDGND
78LD
VSHF
TEMP
Vref
GND
Vcc
SW
A
B1
B2
RF-
B3
RF+
B4
C
65MDG
65MD
78MDG
78MD
MDC
LCD SG3
LCD SG2
LCD SG1
LCD COM
T+
T-
F-
F+


I-a (1/2)
I-b (1/2)
A
B
C
D
SERVO CONTROLLER BLOCK
ADSC
IC1200
MN677061ZYUB
POWER SUPPLY
3.3V
2.7V
DISC DETECT SWITCH
SW3 (12cm detect SW)
SW2 (8cm detect SW)
SW1 (L/E ON/OFF SW)
CLAMP SW
DRIVER BLOCK
IC1300
BA5985FM
POWER SUPPLY
5.0V
3.3V
M1
LOADING MOTOR
CXB5960
M2
SPINDLE MOTOR
CXB6218
M3
CARRIAGE MOTOR
CXB5955
CN1300
I 2/2
VCC5
GND
VCC33
VDD33
VCC27
VD8
PGND
5.0V
8.0V

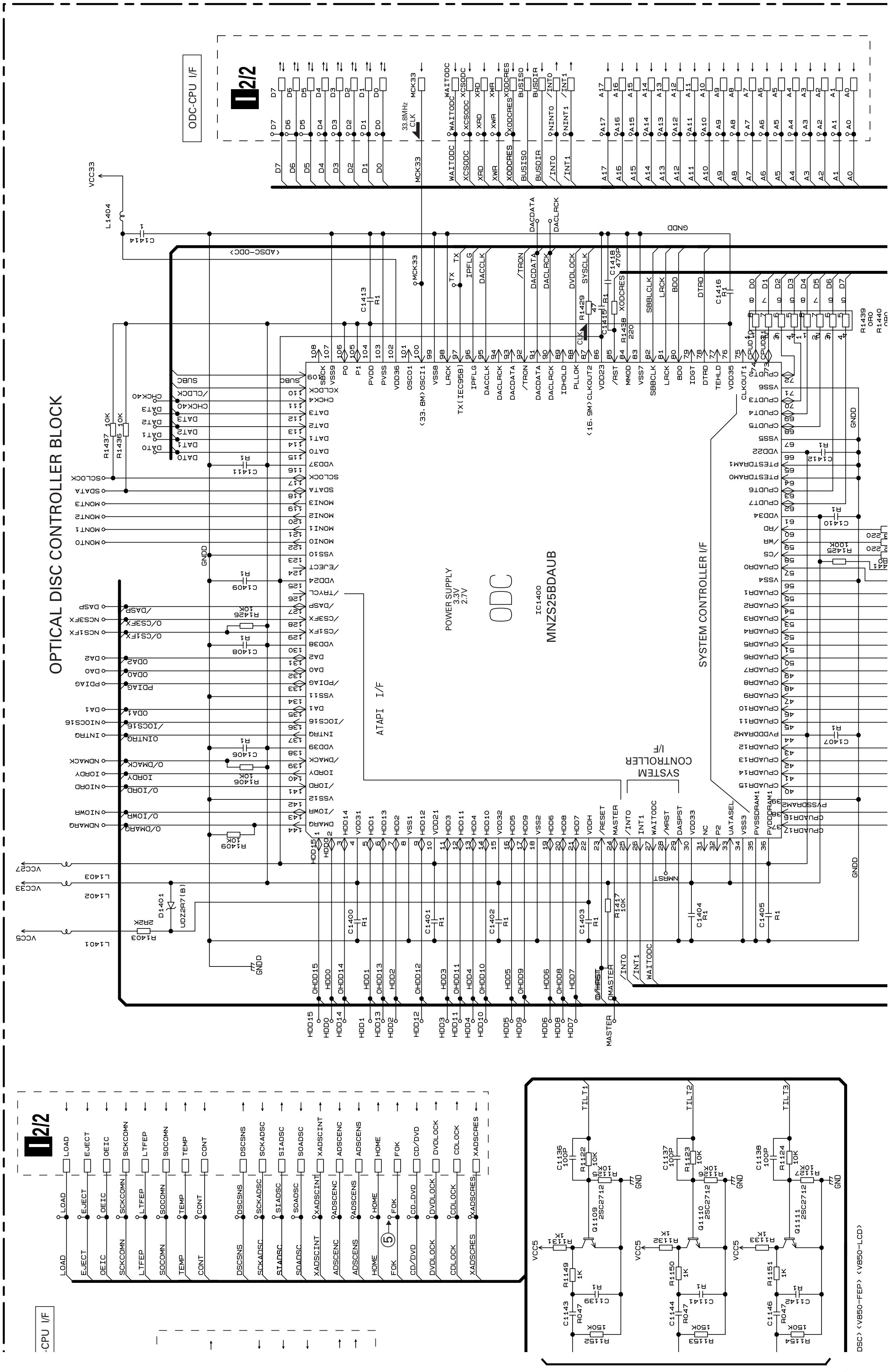
A

I-a (1/2)
I-b (1/2)

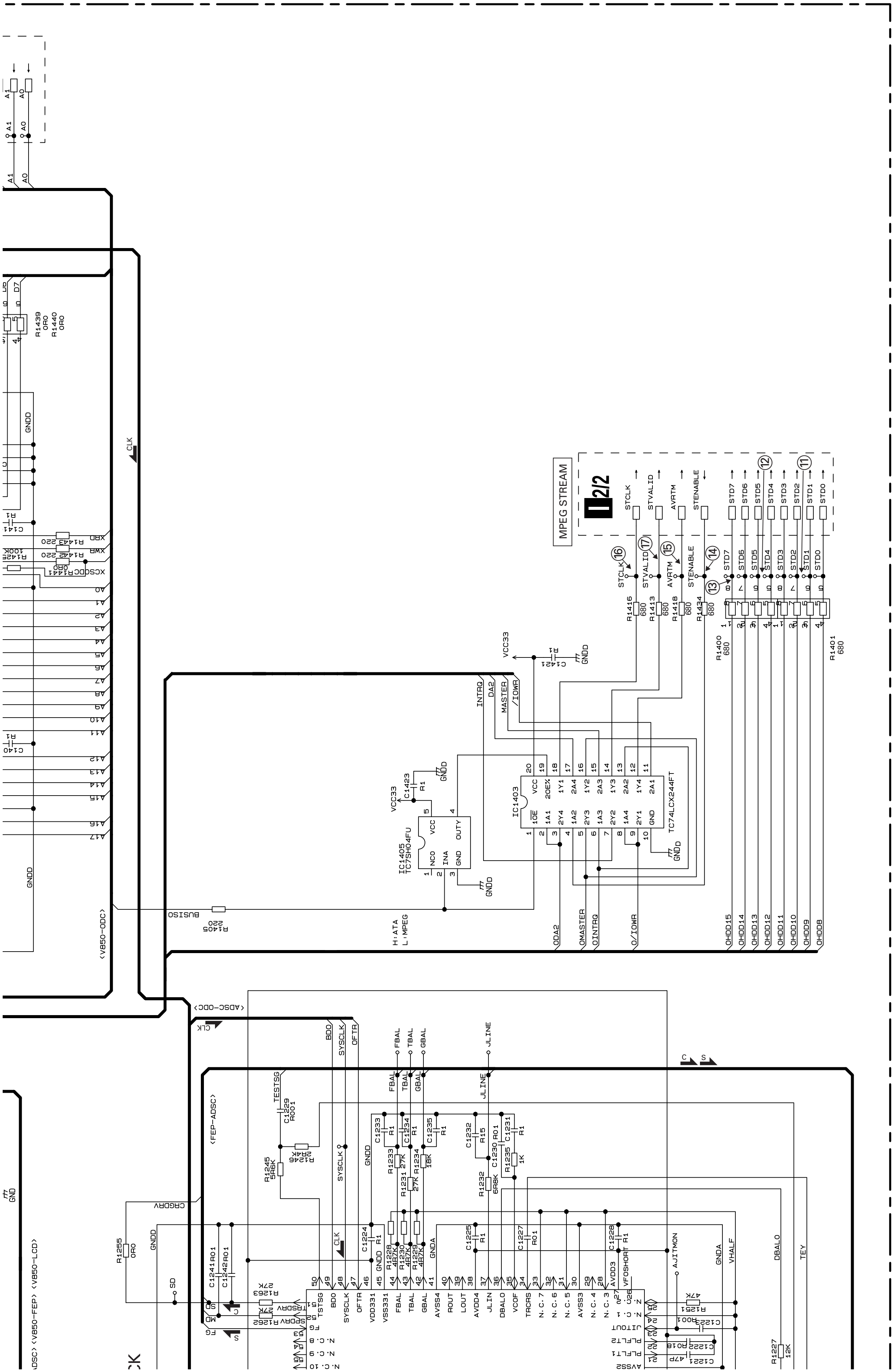
B

C

D

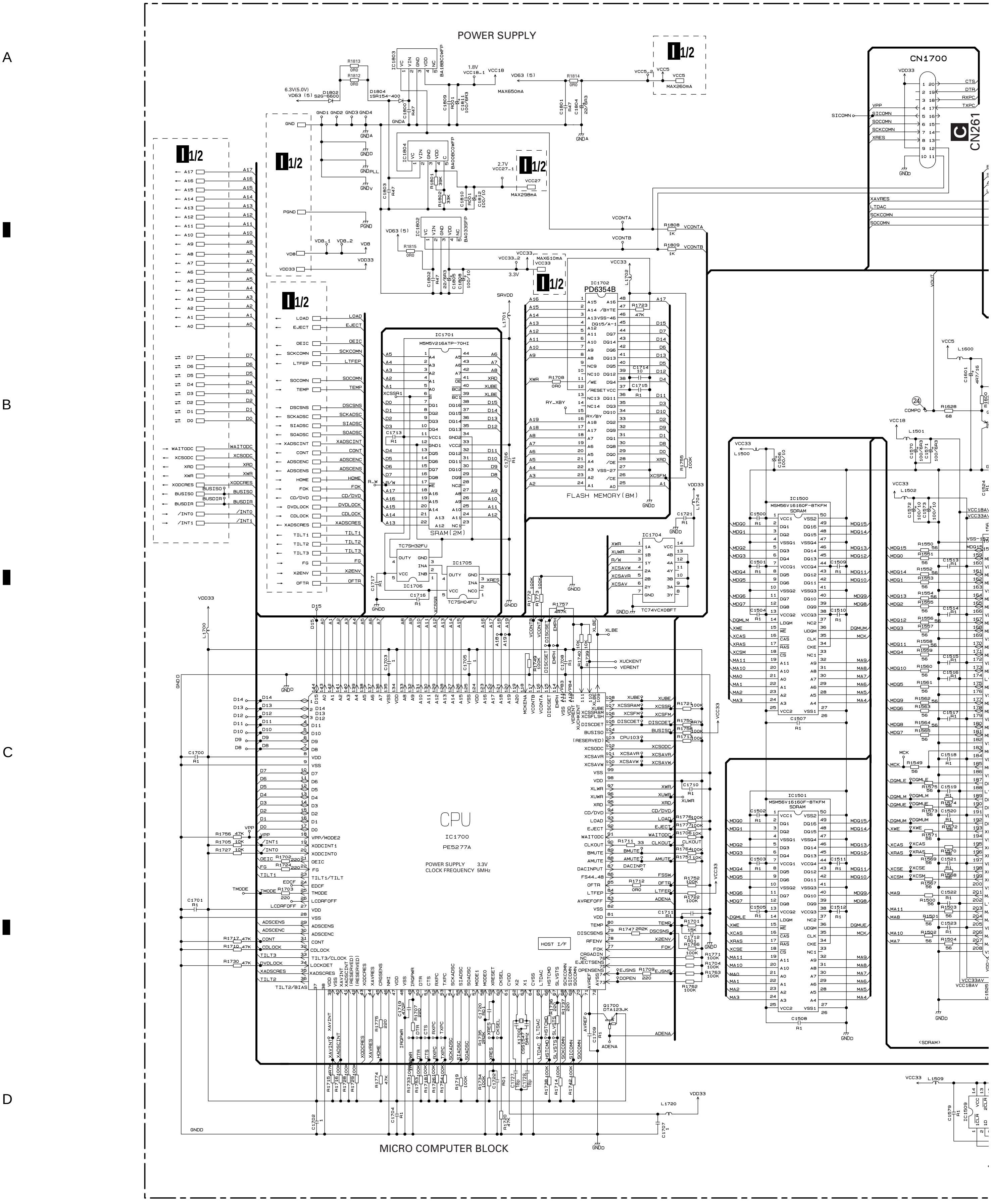

OPTICAL DISC CONTROLLER BLOCK
ODC-CPU I/F
I 2/2
ODC
IC1400
MNZS25BDAUB
POWER SUPPLY
3.3V
2.7V
ATAPI I/F
SYSTEM CONTROLLER I/F
SYSTEM CONTROLLER I/F
33.8MHz CLK
VCC33
VCC27
VCC5
L1401
L1402
L1403
L1404
D1401
UDZ2R7(B)
R1403 2R2K
GNDD
TILT1
TILT2
TILT3
Q1109 2SC2712
Q1110 2SC2712
Q1111 2SC2712
-CPU I/F
1
2
3
DSC>(V850-FEP)(V850-LCD)

I-a (1/2)	I-b (1/2)

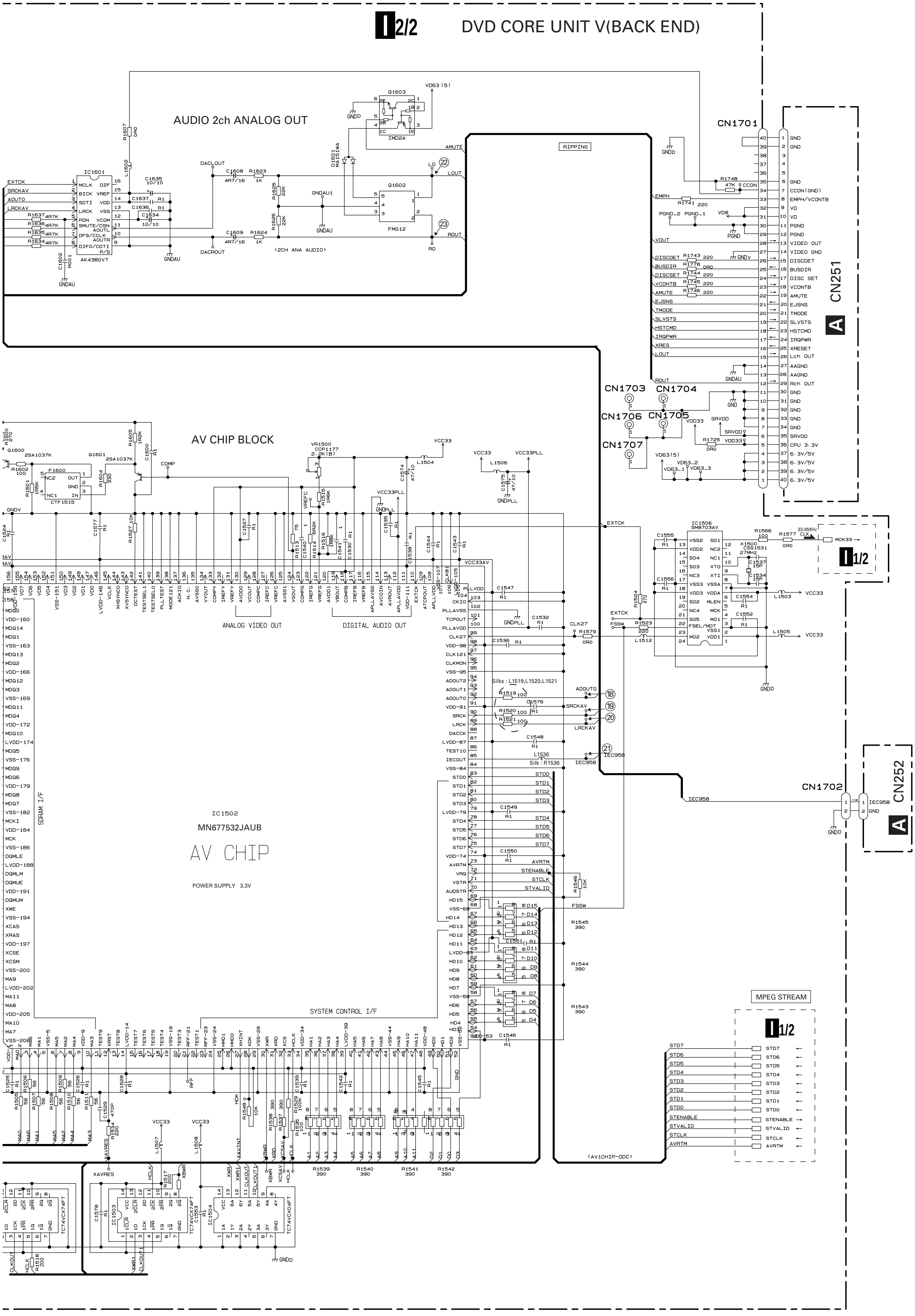

MPEG STREAM
I 2/2
STCLK
STVALID
AVRTM
STENABLE
STD7
STD6
STD5
STD4
STD3
STD2
STD1
STD0
R1416 680
R1413 680
R1418 680
R1434 680
R1400 680
R1401 680
IC1403
TC74LCX244FT
IC1405
TC7SH04FU
VCC33
C1421 R1
C1423 R1
GNDD
INTRQ
DA2
MASTER
/IOWR
ODA2
OMASTER
OINTRQ
O/IOWR
OHDD15
OHDD14
OHDD13
OHDD12
OHDD11
OHDD10
OHDD9
OHDD8
H:ATA
L:MPEG
R1405 220
BUSISO
(V850-ODC)
(ADSC-ODC)
(FEP-ADSC)
(V850-FEP)
(V850-LCD)
CLK
BDO
SYSCLK
OFTR
FBAL
TBAL
GBAL
JLINE
TESTSG
C1229 R001
R1245 5R6K
R1246 2R2K
R1233 27K
R1231 27K
R1234 18K
R1228 487K
R1230 487K
R1229 487K
R1232 6R8K
R1235 1K
R1255 0R0
R1263 27K
R1262
R1251 47K
R1227 12K
C1241 R01
C1242 R01
C1224 R1
C1225 R1
C1227 R01
C1228 R1
C1233 R1
C1234 R1
C1235 R1
C1232 R15
C1230 R01
C1231 R1
C1221 47P
C1222 R018
C1223 R001
CRGDRV
SD
MD
FG
GNDD
GNDA
AJITMON
VHALF
DBALO
TEY
TSTSG
VDD331
VSS331
AVSS4
ROUT
LOUT
AVDD4
JLIN
DBALO
VCOF
TRCRS
AVSS3
AVDD3
VFOSHORT
JITOUT
PLFLT2
PLFLT1
AVSS2
N.C.8
N.C.9
N.C.10
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
XRD
XWR
XCSODC
R1443 220
R1442 220
R1426 100K
R1441 0R0
R1439 0R0
R1440 0R0
C1410 R1
C1411 R1
D7
GND

3.11 DVD MECHANISM MODULE(2/2)(GUIDE PAGE)

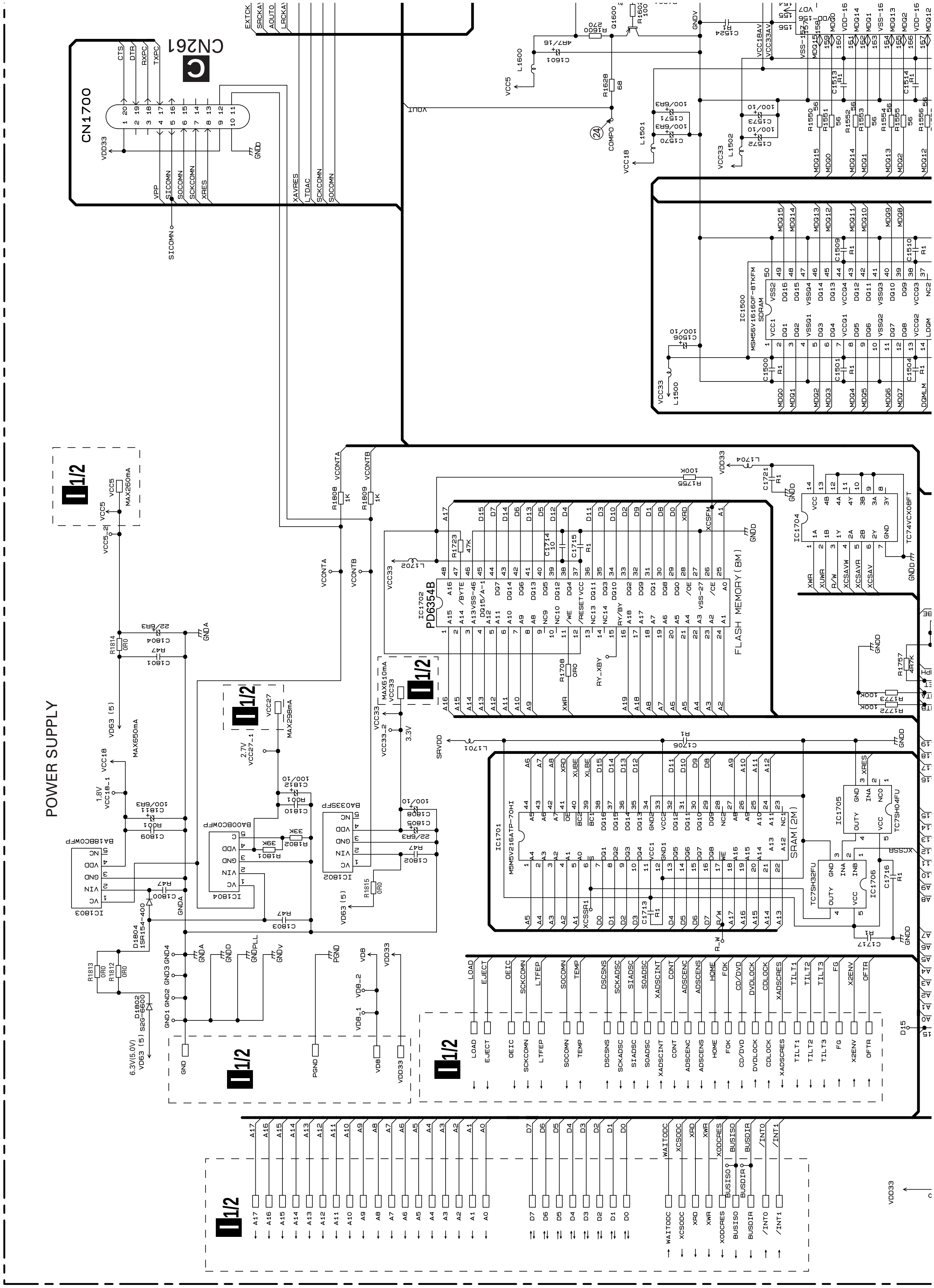
I-a 2/2


A
B
C
D
POWER SUPPLY
I 1/2
IC1803 BA18BC0WFP
IC1804 BA00BC0WFP
IC1802 BA033FP
MAX650mA
MAX260mA
MAX298mA
MAX610mA
CN1700
C CN261
IC1701 M5M5V216ATP-70HI
SRAM(2M)
IC1702 PD6354B
FLASH MEMORY(8M)
IC1704 TC74VCX08FT
IC1705 TC7SH04FU
IC1706 TC7SH32FU
IC1500 M5M56V16160F-8TKFM SDRAM
IC1501 M5M56V16160F-8TKFM SDRAM
CPU
IC1700
PE5277A
POWER SUPPLY 3.3V
CLOCK FREQUENCY 5MHz
HOST I/F
Q1700 DTA123JK
<SDRAM>
MICRO COMPUTER BLOCK

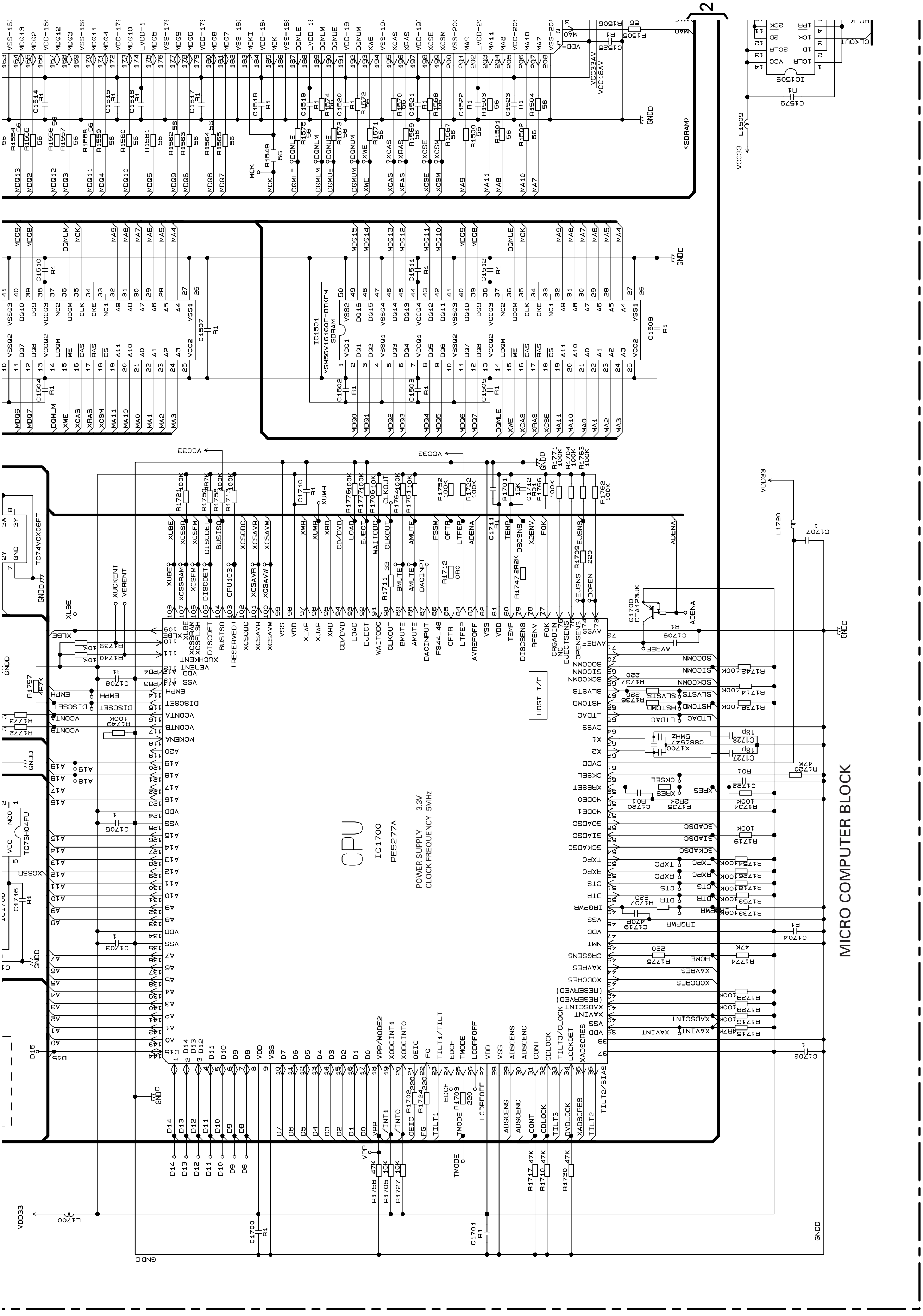
I-b 2/2


I 2/2
DVD CORE UNIT V(BACK END)
AUDIO 2ch ANALOG OUT
IC1601
AK4380VT
Q1603
IMD2A
Q1602
FMG12
D1601
MA151WA
LOUT
ROUT
AMUTE
RIPPING
(2CH ANA AUDIO)
CN1701
CN251
A
CN1703
CN1704
CN1706
CN1705
CN1707
AV CHIP BLOCK
Q1600
2SA1037K
Q1601
F1600
CTF1515
VR1500
CCP1177
2.2K(B)
ANALOG VIDEO OUT
DIGITAL AUDIO OUT
IC1502
MN677532JAUB
AV CHIP
POWER SUPPLY 3.3V
SDRAM I/F
SYSTEM CONTROL I/F
IC1506
SM8703AV
X1500
CSS1531
27MHz
33.8MHz
CLK
MCK33
I 1/2
CN1702
CN252
A
IEC958
MPEG STREAM
I 1/2
STD7
STD6
STD5
STD4
STD3
STD2
STD1
STD0
STENABLE
STVALID
STCLK
AVRTM
(AV1CHIP-ODC)
IC1503
TC74VCX74FT
IC1504
TC74VCX04FT
GNDD
GNDAU
GNDV
VCC33
VCC33PLL

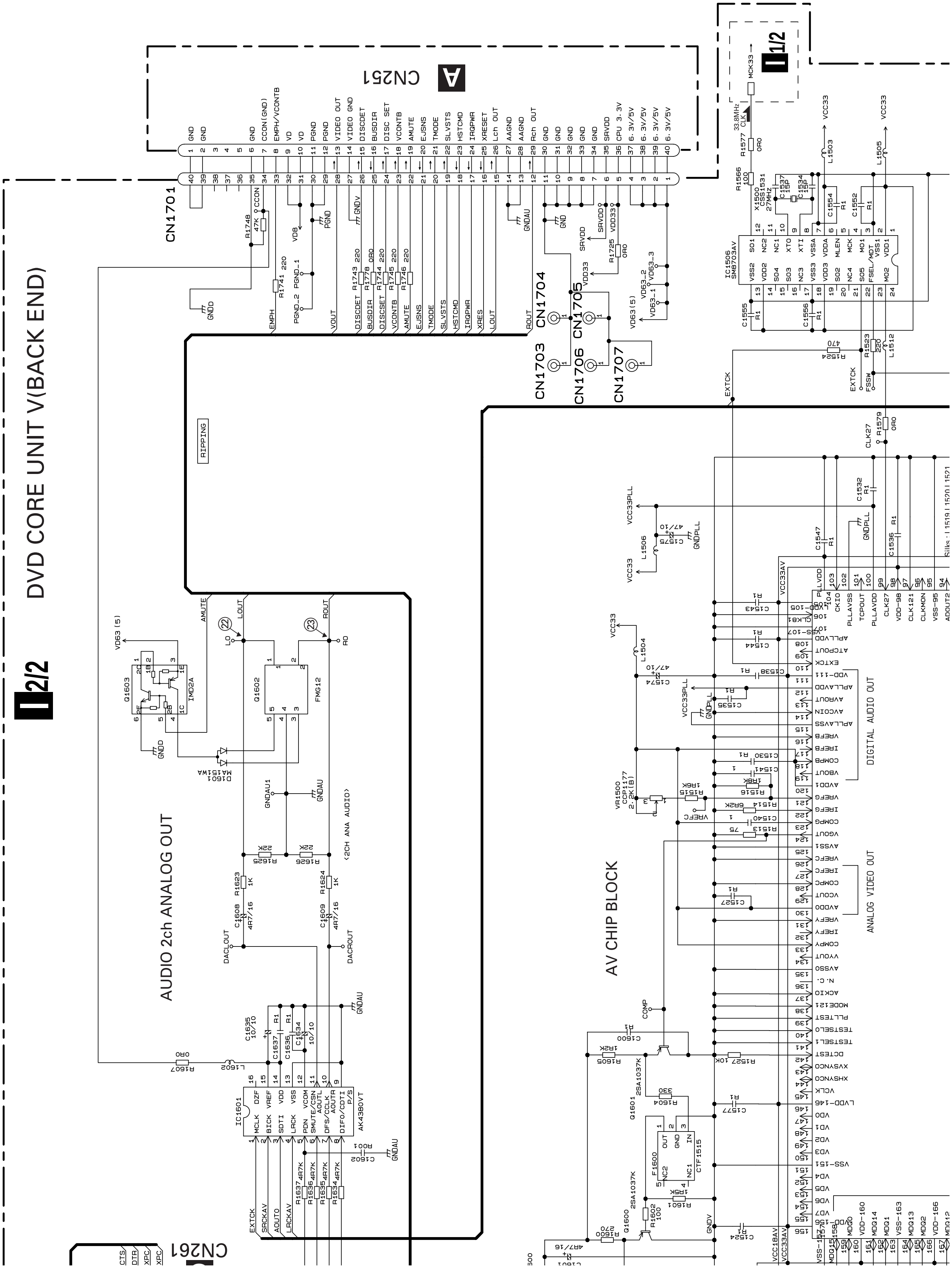
I-a (2/2) I-b (2/2)


POWER SUPPLY
CN1700
CN261
C
IC1803 BA18BC0WFP
IC1804 BA00BC0WFP
IC1802 BA033SFP
IC1702 PD6354B
FLASH MEMORY (8M)
IC1701 M5M5V216ATP-70HI
SRAM (2M)
IC1500 M5M56V16160F-8TKFM SDRAM
IC1704 TC74VCX08FT
IC1705 TC7SH04FU
IC1706 TC7SH32FU
I 1/2

I-a (2/2) I-b (2/2)

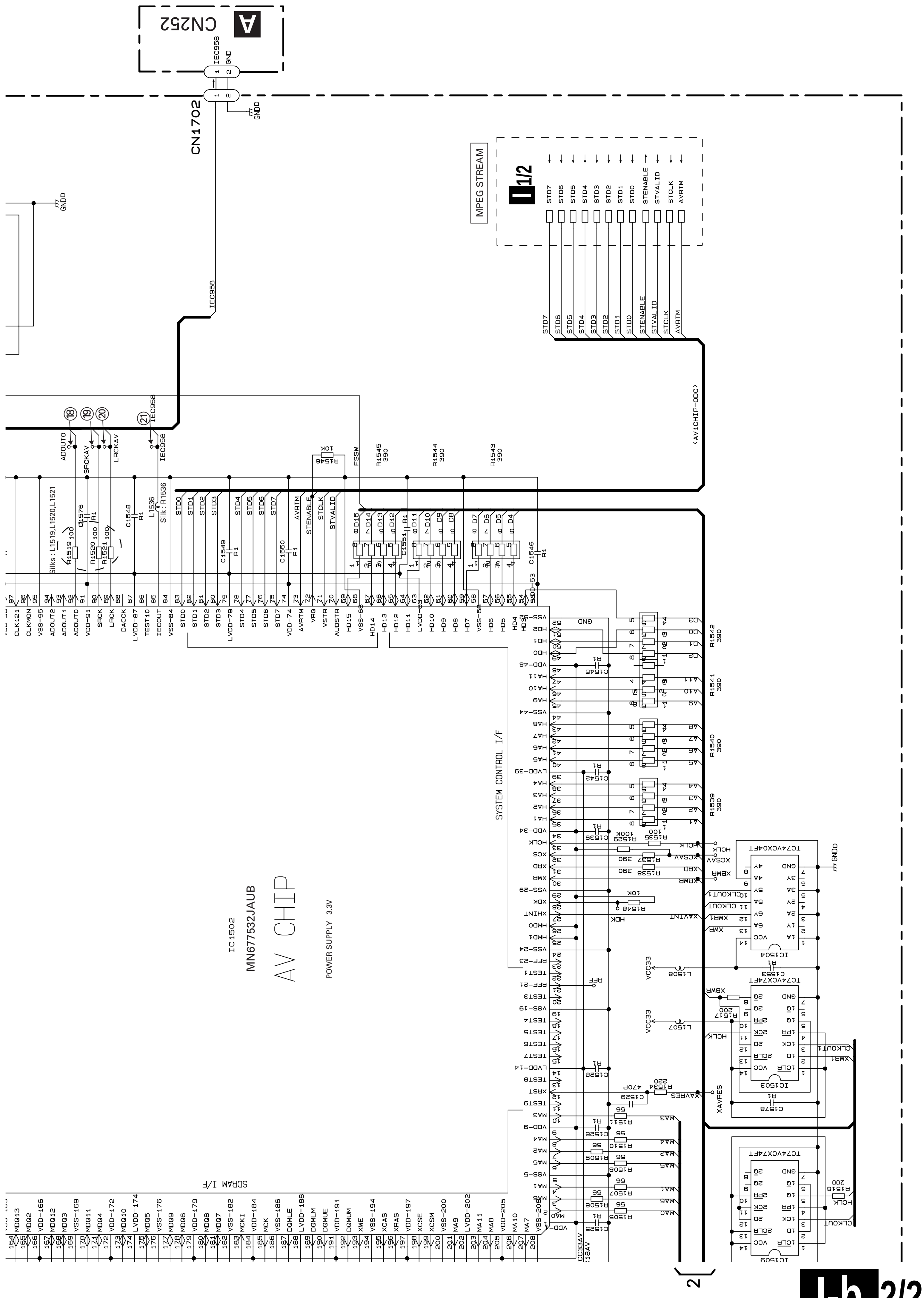

MICRO COMPUTER BLOCK
CPU
IC1700
PE5277A
POWER SUPPLY 3.3V
CLOCK FREQUENCY 5MHz
HOST I/F
IC1501
MSM56V16160F-8TKFM
SDRAM
IC1509
TC74VCX08FT
TC7SH04FU
<SDRAM>
VCC33
VDD33
GNDD
X1700 CSS1547 5MHZ
Q1700 DTA123JK

A
B
C
D


DVD CORE UNIT V(BACK END)
CN251
A
1/2
2/2
CN1701
CN1703
CN1704
CN1705
CN1706
CN1707
RIPPING
AUDIO 2ch ANALOG OUT
AV CHIP BLOCK
DIGITAL AUDIO OUT
ANALOG VIDEO OUT
IC1601
AK4380VT
IC1506
SM8703AV
X1500
CSS1531
27MHz
Q1602
FMG12
Q1603
IMD2A
D1601
MA151WA
Q1600
2SA1037K
Q1601
2SA1037K
F1600
CTF1515
VR1500
CCP1177
2.2K(B)
(2CH ANA AUDIO)
DACLOUT
DACROUT
LOUT
ROUT
AMUTE
EXTCK
SRCKAV
ADUTO
LRCKAV
GNDAU
VCC33
VCC33PLL
VD63(5)
CN261
CTS
DTR
XPC
XPC

I-a (2/2) I-b (2/2)

A


CN252
A
IEC958
GND
CN1702
GNDD
MPEG STREAM
I 1/2
STD7
STD6
STD5
STD4
STD3
STD2
STD1
STD0
STENABLE
STVALID
STCLK
AVRTM
<AV1CHIP-ODC>
ADOUT0
SRCKAV
LRCKAV
IEC958
FSSW
R1545 390
R1544 390
R1543 390
R1546 10K
IC1502
MN677532JAUB
AV CHIP
POWER SUPPLY 3.3V
SYSTEM CONTROL I/F
SDRAM I/F
R1542 390
R1541 390
R1540 390
R1539 390
HCLK
XCSAV
XRD
XBWR
XAVINT
HDK
CLKOUT1
XWR1
VCC33
L1508
L1507
XAVRES
R1534 220
C1529 470P
IC1504 TC74VCX04FT
IC1503 TC74VCX74FT
IC1509 TC74VCX74FT
R1517 200
R1518 200
C1578
C1553
CC33AV
18AV
2

B

C

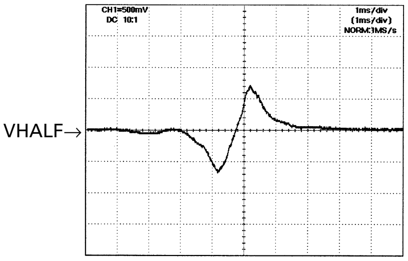
D

I-b 2/2

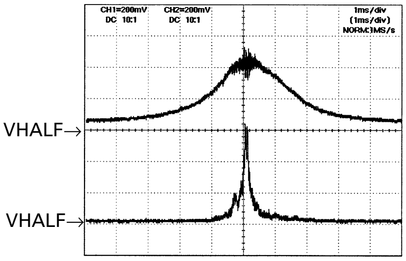
● Waveforms

Note:1. The encircled number denote measuring pointes in the circuit diagram.
2. Reference voltage VHALF : 1.65V

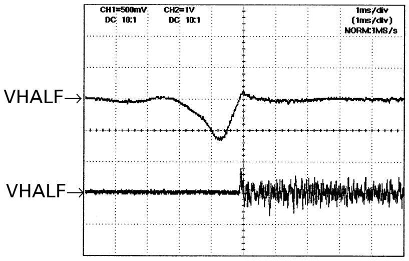
① FEY 500mV/div. 1ms/div.
Focus search



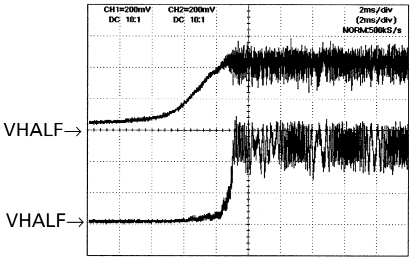
② CH1: ASF 200ms/div. 1ms/div.
③ CH2: RFENV
Focus search



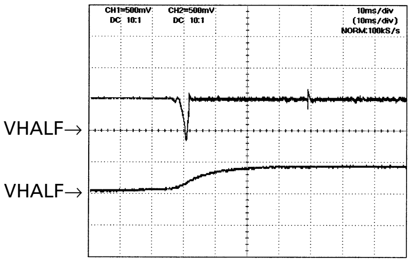
① CH1: FEY 500mV/div. 1ms/div.
④ CH2: FD 1V/div. 1ms/div.
Focus close



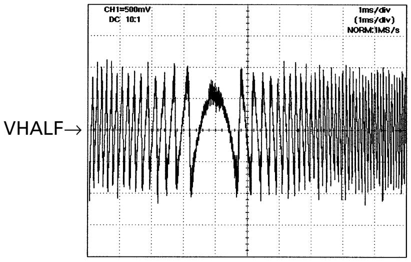
② CH1: ASF 200mV/div. 2ms/div.
③ CH1: RFENV
Focus close



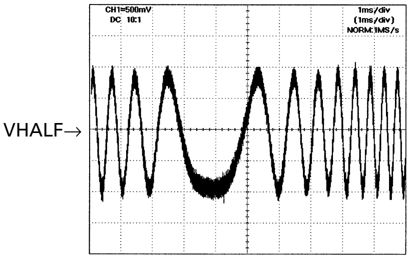
① CH1: FEY 500mV/div. 10ms/div.
⑤ CH2: FOK
Focus close



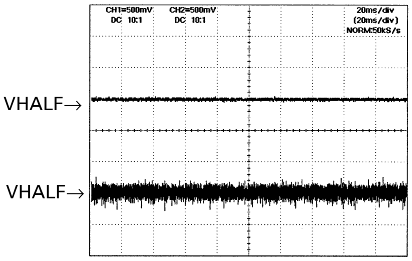
⑥ CH1: TEY 500mV/div. 1ms/div.
Focus close(DVD)



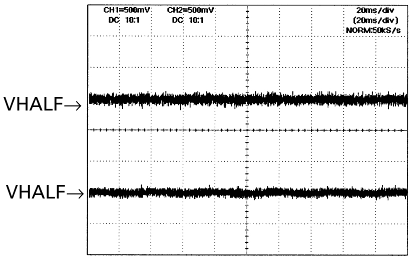
⑥ CH1: TEY 500mV/div. 1ms/div.
Focus close(CD)



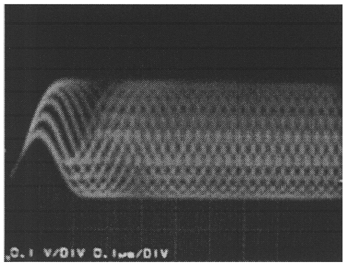
① CH1: FEY 500mV/div.20ms/div.
④ CH2: FD
Play



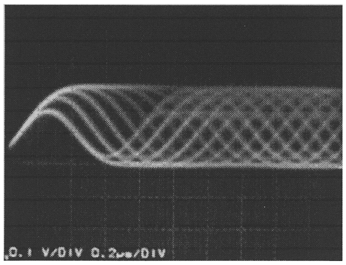
⑥ CH1: TEY 500mV/div.20ms/div.
⑦ CH2: TD
Play



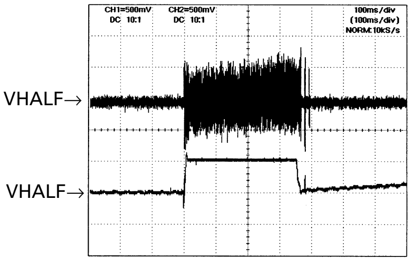
⑧ CH1: RFOUT 0.1V/div. 0.1μs/div.
Play(DVD surroundings on inside)



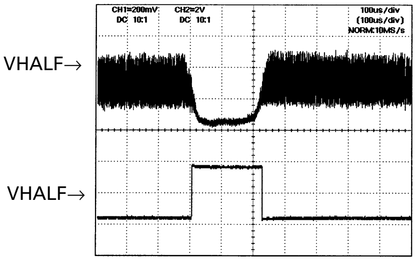
⑧ CH1: RFOUT 0.1V/div. 0.2μs/div.
Play(CD)



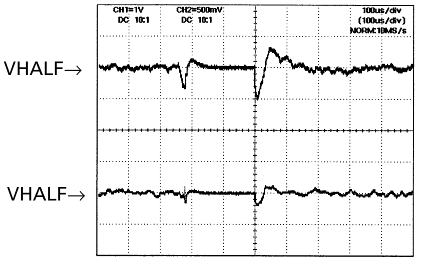
⑥ CH1: TEY 500mV/div. 100ms/div.
⑨ CH2: CRGDRV
Surroundings on inside->
surroundings on outside



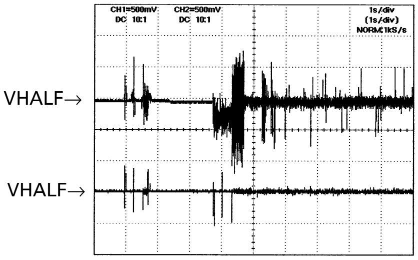
⑧ CH1: RFOUT 200mV/div. 100μs/div.
⑩ CH2: BDO 2V/div. 100μs/div.
Black dot



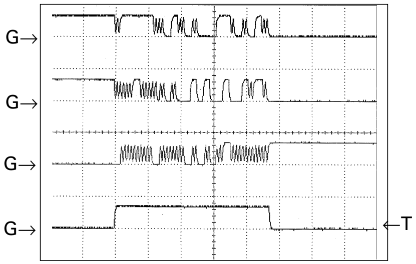
④ CH1: FD 1V/div. 100μs/div.
⑦ CH2: TD 500mV/div. 100μs/div.
Black dot



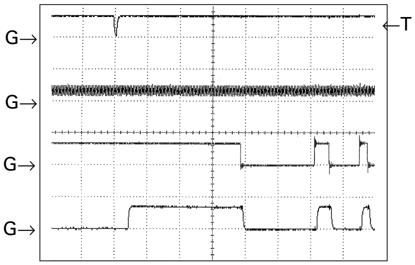
⑥ CH1: TEY 500mV/div.1s/div.
① CH2: FEY
EDC1 mode set up(DVD)



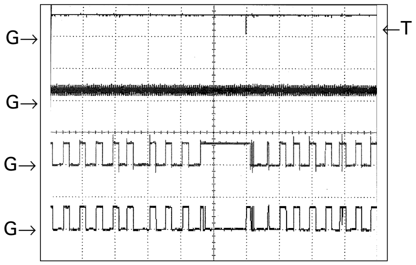
⑪ CH1: STD1
⑫ CH2: STD4 5V/div. 2μs/div.
⑬ CH3: STD7
⑭ CH4: STENABLE



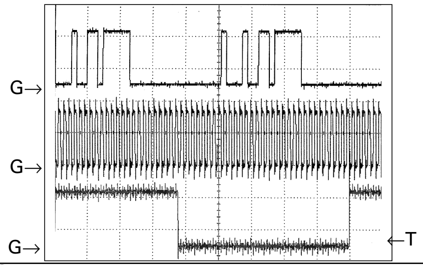
⑮ CH1: AVRTM
⑯ CH2: STCLK 5V/div. 2μs/div.
⑰ CH3: STVALID
⑭ CH4: STENABLE



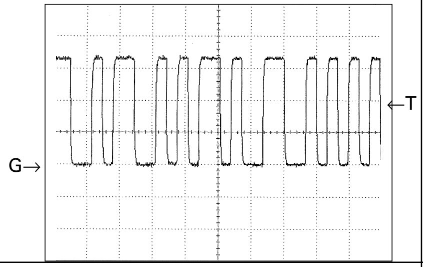
⑮ CH1: AVRTM
⑯ CH2: STCLK 5V/div. 50μs/div.
⑰ CH3: STVALID
⑭ CH4: STENABLE



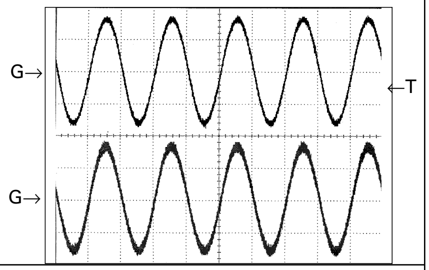
⑱ CH1: AOUT0
⑲ CH2: SRCKAV 2V/div. 2μs/div.
⑳ CH3: LRCKAV



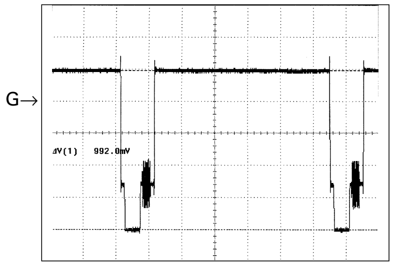
㉑ CH1: IEC958 1V/div. 500ns/div.



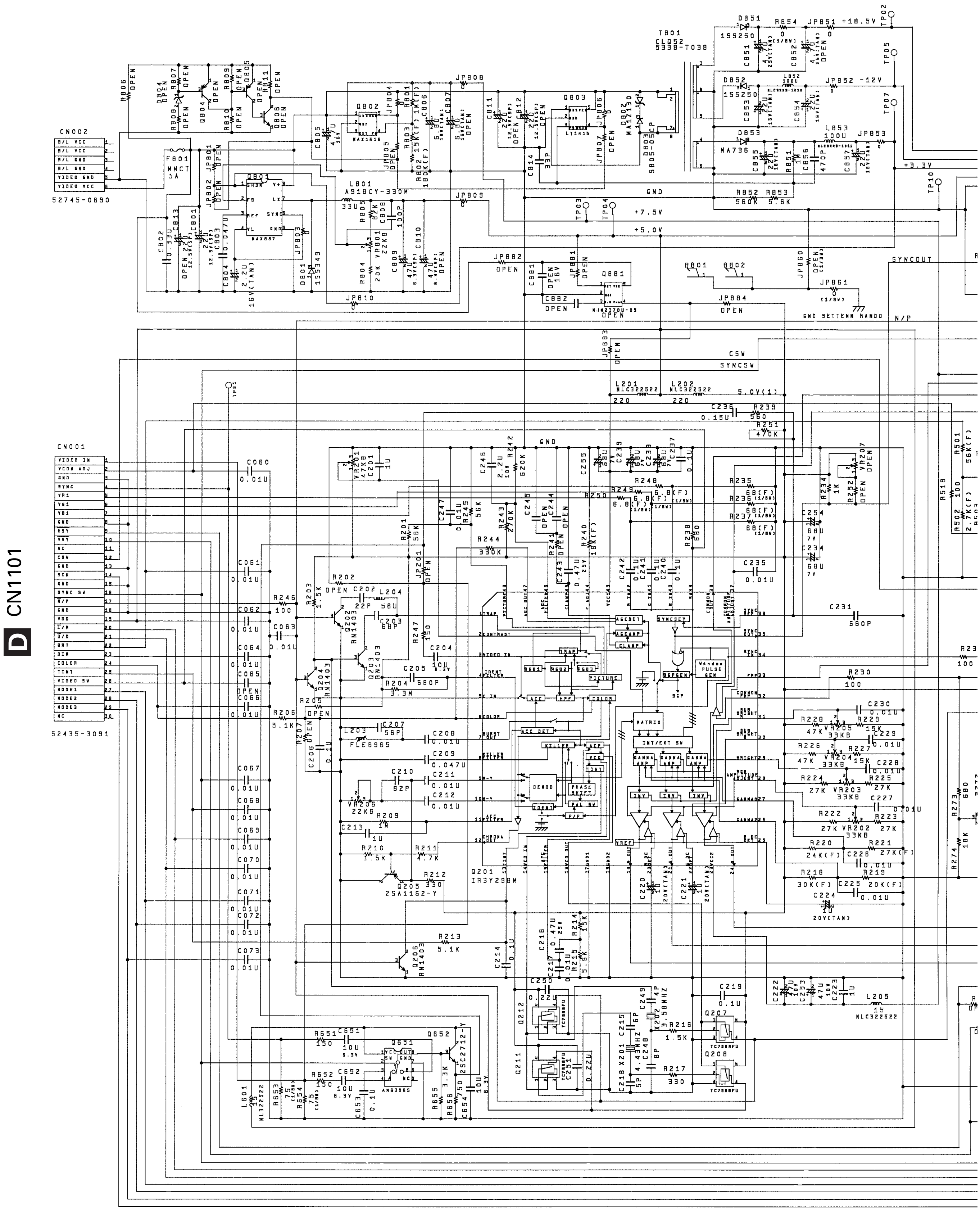
㉒ CH1: LO 1V/div. 500μs/div.
㉓ CH2: RO



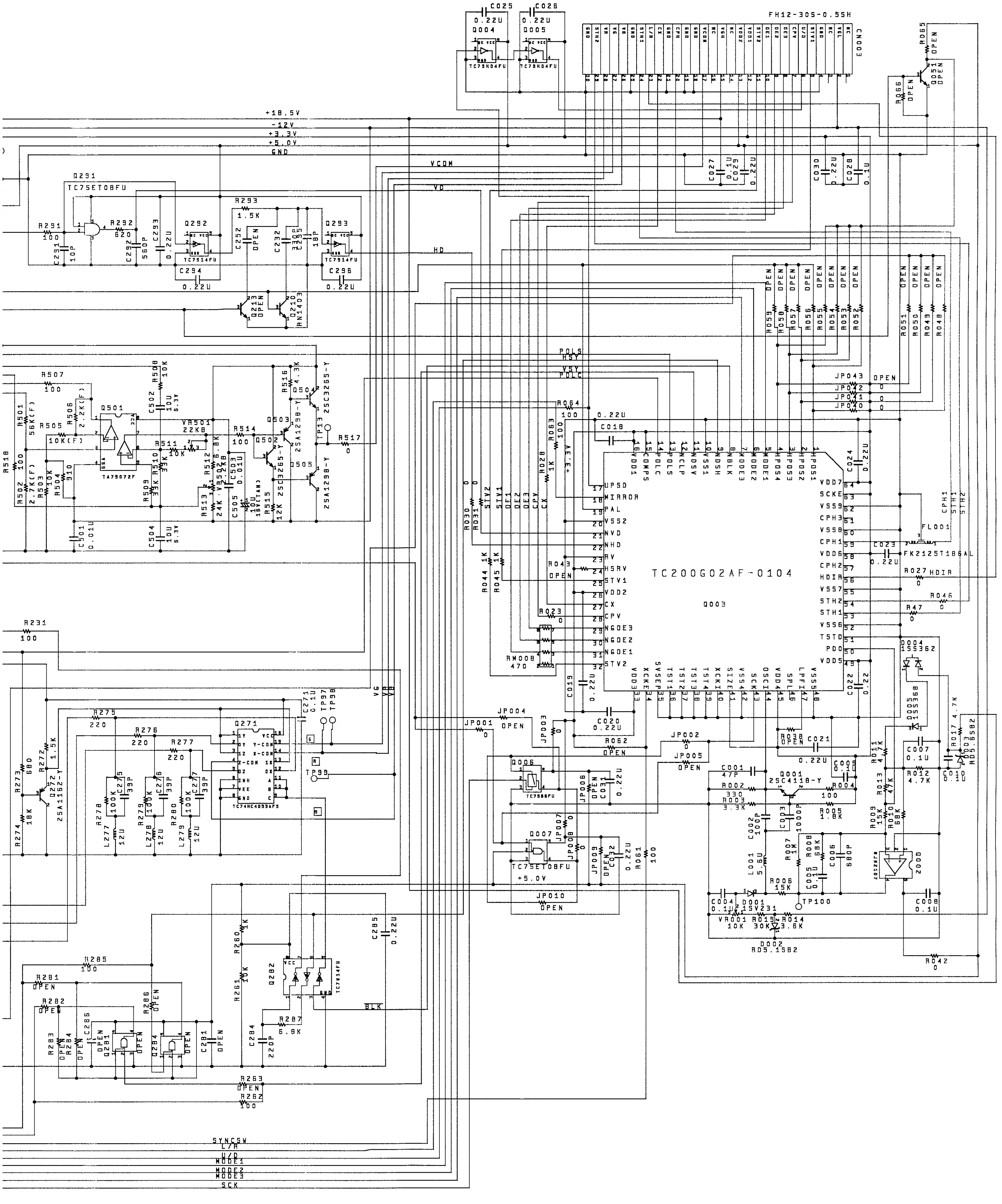
㉔ CH1: COMPO 200mV/div. 10μs/div.
[White 100% output]



3.12 VIDEO SCHEMATIC


A
B
C
D
D CN1101
CN002
B/L VCC
B/L VCC
B/L GND
B/L GND
VIDEO GND
VIDEO VCC
52745-0690
CN001
VIDEO IN
VCOM ADJ
GND
SYNC
VR1
VG1
VB1
GND
HSY
VSY
NC
CSW
GND
SCK
GND
SYNC SW
N/P
GND
VDD
L/R
U/D
BRT
DIN
COLOR
TINT
VIDEO SW
MODE1
MODE2
MODE3
NC
52435-3091
TP01
TP02
TP03
TP04
TP05
TP07
TP10
T801
CL052
5338-T038
D851
1SS250
R854
0
JP851
+18.5V
C851
C852
D852
1SS250
L852
100U
JP852
-12V
C853
C854
D853
MA736
L853
100U
JP853
C855
R851
C856
470P
C857
+3.3V
R852
560K
R853
5.6K
GND
+7.5V
+5.0V
SYNCOUT
N/P
CSW
SYNCSW
R806
Q804
R807
Q805
R809
R811
R808
Q804
R810
Q806
OPEN
JP808
Q802
MAX1616
JP804
R801
C806
C807
C805
R803
R802
JP805
C811
C812
Q803
LT1615
JP806
D802
MA2S30
D803
SB05-05CP
JP807
C814
33P
FB01
MHCT
1A
JP801
JP802
Q801
SHDN
REF
FB
VL
LX
SYNC
GND
MAX887
L801
A918CY-330M
33U
R805
C808
100P
JP809
C802
0.33U
C813
C801
22U
C803
0.047U
C804
2.2U
16V(TAN)
JP803
D801
1SS349
R804
20K
VR801
22KB
C809
47U
C810
47U
JP810
JP882
C881
JP881
Q881
NJM2370U-05
C882
JP884
JP883
R801
R802
JP860
JP861
GND SETTENN RANDO
L201
NLC322522
220
L202
NLC322522
220
5.0V(1)
C236
0.15U
R239
560
R251
470K
GND
C060
0.01U
C061
0.01U
C062
0.01U
C063
0.01U
C064
0.01U
C065
OPEN
C066
0.01U
C067
0.01U
C068
0.01U
C069
0.01U
C070
0.01U
C071
0.01U
C072
0.01U
C073
0.01U
VR201
47KB
C201
1U
C246
2.2U
10V
R242
620K
C255
C239
68U
C238
68U
C237
0.1U
R248
6.8(F)
R249
6.8(F)
R250
6.8(F)
R235
68(F)
R236
68(F)
R237
68(F)
R234
1K
R252
VR207
R501
56K(F)
R518
100
R502
2.7K(F)
C247
0.01U
R245
56K
R243
270K
C245
C244
R201
56K
R244
330K
R241
R240
18K(F)
R238
680
C254
68U
C234
68U
7V
JP201
OPEN
C243
0.47U
25V
C242
0.01U
C241
0.01U
C240
0.01U
C235
0.01U
R202
OPEN
C202
22P
L204
56U
C203
68P
R246
100
R203
1.5K
Q202
RN1403
R247
150
C204
10U
6.3V
Q203
RN1403
Q204
RN1403
C205
680P
R204
3.3M
R205
OPEN
R206
5.1K
R207
OPEN
C206
0.1U
L203
FLE6965
C207
56P
C208
0.01U
C209
0.047U
C210
82P
C211
0.01U
C212
0.01U
VR206
22KB
R208
1K
R209
1M
C213
1U
R210
1.5K
R211
4.7K
R212
330
Q205
2SA1162-Y
Q201
IR3Y29BM
TRAP
CONTRAST
VIDEO IN
IDENT FILTER
SC IN
COLOR
BURST INPUT
KILLER FILTER
SN-Y
ACC FILTER
CHROMA OUT
AGCDET
AGCAMP
CLAMP
SYNCSEP
RGB1
RGB2
RGB3
PICTURE
HPF
ACC
COLOR
ACC DET
KILLER
APC
VCO
TINT
DEMOD
PHASE SHIFT
PAL SW
IDENT
F/F
BGPGEN
BGP
Window PULSE GEN
MATRIX
INT/EXT SW
GAMMA AMP
GAMMA AMP
GAMMA AMP
INV
INV
INV
VREF
C231
680P
R230
100
C230
0.01U
R228
47K
VR205
33KB
R229
15K
C229
0.01U
R226
47K
VR204
33KB
R227
15K
C228
0.01U
R224
27K
VR203
33KB
R225
27K
C227
0.01U
R222
27K
VR202
33KB
R223
27K
R220
24K(F)
C226
0.01U
R221
27K(F)
R218
30K(F)
C225
0.01U
R219
20K(F)
C224
20V(TAN)
C220
20V(TAN)
C221
20V(TAN)
R273
680
R274
18K
R23
100
R213
5.1K
Q206
RN1403
C214
0.1U
C216
0.47U
25V
R214
15K
C217
0.01U
R215
5.6K
C250
0.22U
Q212
TC7S66FU
Q211
TC7S66FU
C251
0.22U
C215
6P
C249
4P
X202
3.58MHZ
R216
1.5K
X201
4.43MHZ
C248
8P
C218
5P
R217
330
C219
0.1U
Q207
TC7S66FU
Q208
TC7S66FU
C222
47U
C253
47U
10V
C223
1U
L205
15
NLC322522
R651
150
C651
10U
6.3V
Q651
AN6308S
Q652
2SC2712-Y
R652
150
C652
10U
6.3V
C653
0.1U
L601
15
NLC322522
R653
75
R654
75
R655
3.3K
R656
750
C654
10U
6.3V

J VIDEO SCHEMATIC


FH12-30S-0.5SH
CN003
C025 0.22U
C026 0.22U
Q004 TC7SH04FU
Q005 TC7SH04FU
R065 OPEN
Q051 OPEN
R066 OPEN
+18.5V
-12V
+3.3V
+5.0V
GND
VCOM
VD
HD
C027 0.1U
C029 0.22U
C030 0.22U
C028 0.1U
Q291 TC7SET08FU
R291 100
C291 10P
R292 620
C292 560P
C293 0.22U
Q292 TC7S14FU
C294 0.22U
R293 1.5K
C252 OPEN
C232 330P
C295 18P
Q293 TC7S14FU
C296 0.22U
Q213 OPEN
Q210 RN1403
R059 R058 R057 R056 R055 R054 R053 R052 OPEN
R051 R050 R049 R048 OPEN
POLS
HSY
VSY
POLC
R507 100
R508 10K
R501 56K(F)
R506 2.2K(F)
Q501 TA75072F
R505 10K(F)
C502 10U 6.3V
VR501 22KB
R511 10K
R510 39K
R509 39K
R512 6.8K
VR502 22KB
R513 24K
C503 0.01U
C505 10U 16V(TAN)
R514 100
R515 12K
R516 4.3K
Q504 2SC3265-Y
Q503 2SA1298-Y
Q502 2SC3265-Y
Q505 2SA1298-Y
TP13
R517 0
R518 100
R502 2.7K(F)
R503 10K
R504 310
C501 0.01U
C504 10U 6.3V
JP043 OPEN
JP042 0
JP041 0
JP040 0
R064 100
R063 1K
C018 0.22U
+3.3V
R028 1K
R030 0
R031 0
STV2 STV1 OE1 OE2 OE3 CPV CX
C024 0.22U
R044 1K
R045 1K
R043 OPEN
R023 0
RM008 470
TC200G02AF-0104
Q003
UPSD MIRROR PAL VSS2 NVD NHD RV HSRV STV1 VDD2 CX CPV NGOE3 NGOE2 NGOE1 STV2
VDD1 CMPS POLC POLS NCLP VSS1 NDSY NDSH NBLK MODE3 MODE2 MODE1 HPOS4 HPOS3 HPOS2 HPOS1
VDD7 SCKE VSS9 CPH3 VSS8 CPH1 VDD6 CPH2 HDIR VSS7 STH2 STH1 VSS6 TSTD PDO VDD5
VDD3 XCKE SYSEP TST1 TST2 TST3 TST4 XCKI SIZE VSS4 SCK DSCI VDD4 SPLD LPFI VSS5
CPH1 STH1 STH2
FL001
C023 0.22U
FK2125T1B6AL
R027 0 HDIR
R046 0
R47 0
D004 1SS362
D005 1SS368
R017 4.7K
D003 RD5.6SB2
C007 0.1U
R012 4.7K
C010 0.1U
R011 4.7K
R013 47K
C019 0.22U
C020 0.22U
C022 0.22U
JP004 OPEN
JP001 0
JP003 0
JP002 0
JP005 OPEN
R062 OPEN
R038 OPEN
C021 0.22U
Q006 TC7S08FU
JP006 OPEN
C031 0.22U
C001 47P
Q001 2SC4116-Y
C009 0.1U
R002 330
R003 3.3K
R004 100
R005 1.8K
R009 15K
R010 68K
C002 100P
C003 1000P
Q007 TC7SET08FU
JP007 0
JP008 0
JP009 OPEN
C032 0.22U
R061 100
+5.0V
JP010 OPEN
L001 5.6U
R007 1K
R008 68K
C005 0.1U
C006 680P
R006 15K
Q002 NJM2107
C004 0.1U
D001 1SV231
VR001 10K
R015 30K
R014 3.6K
TP100
D002 RD5.1SB2
C008 0.1U
R042 0
R231 100
VG VB VR
C271 0.1U
TP97 TP98
R275 220
R276 220
R277 220
Q271 TC74HC4053AFS
R272 1.5K
R273 680
Q272 2SA1162-Y
R274 18K
R278 100K
C275 39P
R279 100K
C276 39P
R280 100K
C277 39P
L277 12U
L278 12U
L279 12U
TP99
C285 0.22U
R260 1K
R261 10K
Q282 TC7W14FU
BLK
R285 100
R281 OPEN
R282 OPEN
R286 OPEN
R283 OPEN
R284 OPEN
C286 OPEN
Q281
Q284
C281 OPEN
C284 220P
R287 6.8K
R263 OPEN
R262 0
SYNCSW
L/R
U/D
MODE1
MODE2
MODE3
SCK

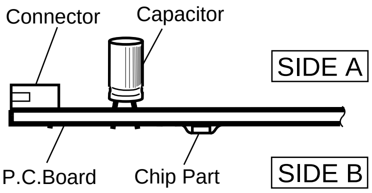
A **CONTROL PCB**

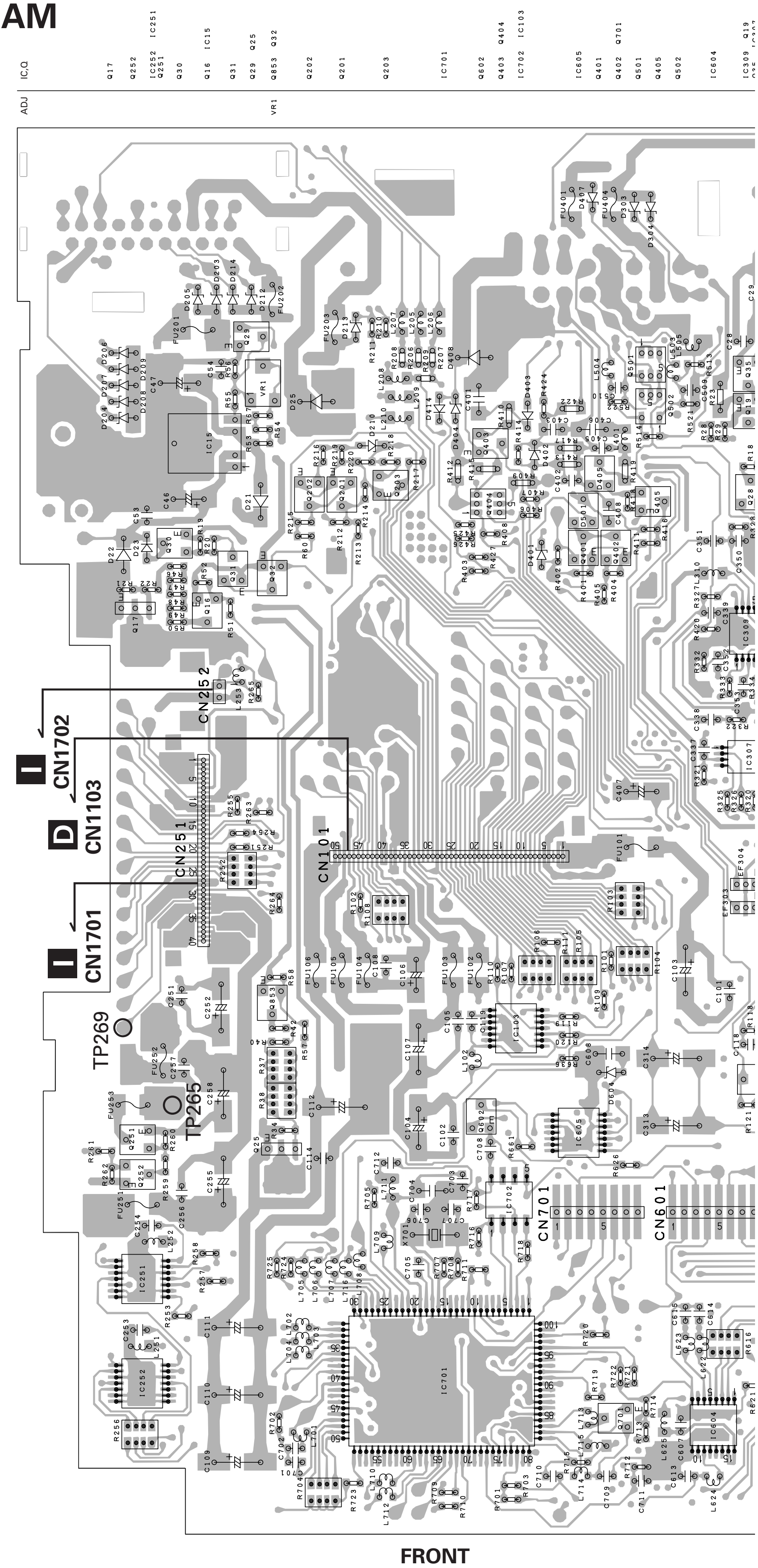
4. PCB CONNECTION DIAGRAM

4.1 CONTROL PCB

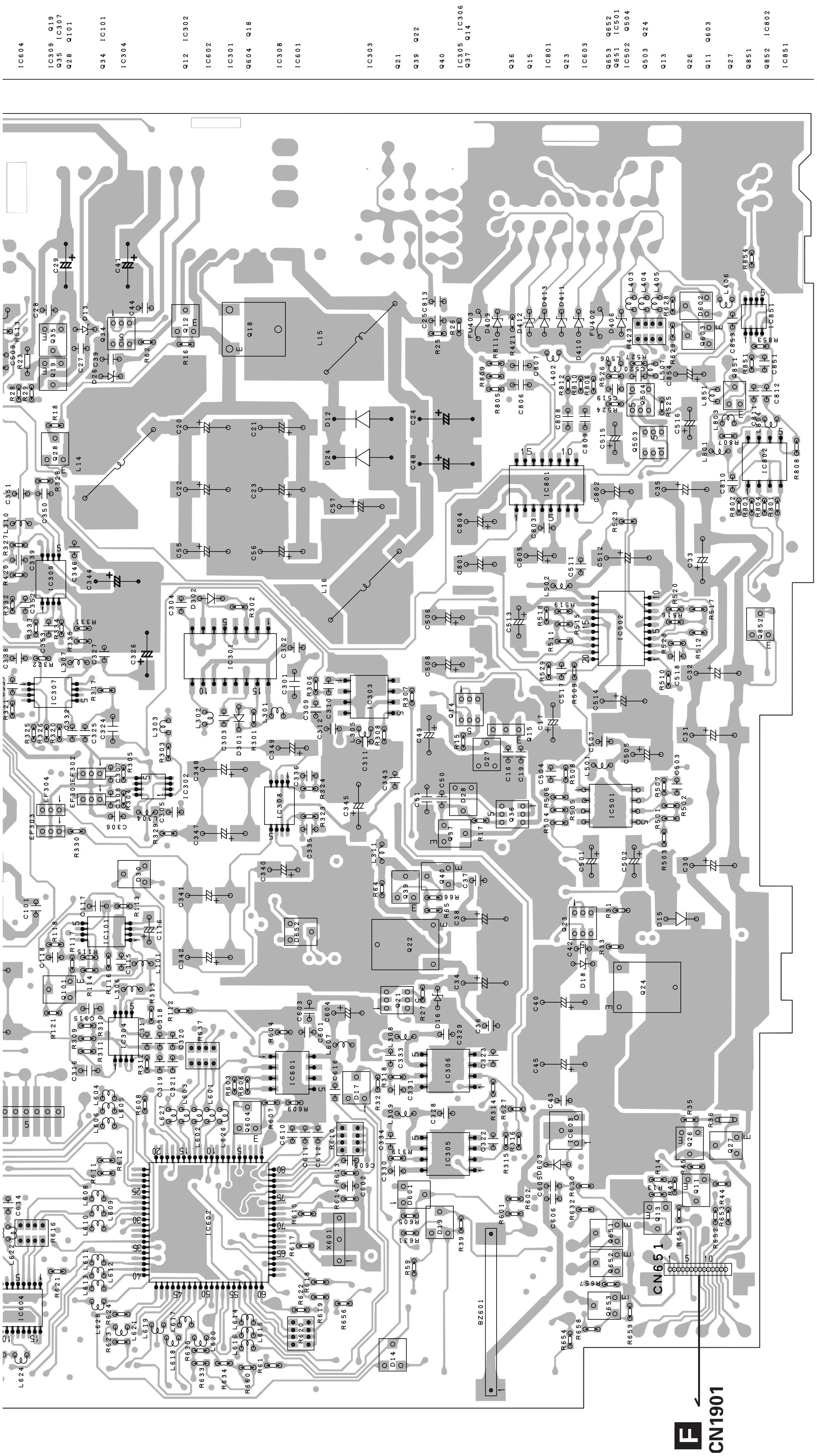
NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination. For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams


Connector
Capacitor
SIDE A
P.C.Board
Chip Part
SIDE B


IC,Q
ADJ
VR1
CN1702
CN1103
CN1701
CN251
CN252
CN101
CN701
CN601
TP269
TP265
IC701
IC251
IC252
IC15
IC103
IC605
IC702
IC604
I
D
I
FRONT

SIDE A


IC604
IC309
Q35
Q28
Q19
IC307
Q101
Q34
IC101
IC304
Q12
IC302
IC602
IC301
Q604
Q18
IC308
IC601
IC303
Q21
Q39
Q22
Q40
IC305
Q37
IC306
Q14
Q36
Q15
IC801
Q23
IC603
Q653
Q651
Q652
IC502
IC501
Q503
Q504
Q24
Q13
Q26
Q11
Q603
Q27
Q851
Q852
IC802
IC851
IC602
IC601
IC501
IC502
IC801
IC802
Q22
Q24
Q18
L15
L16
L14
CN651
BZ601
X601
F CN1901

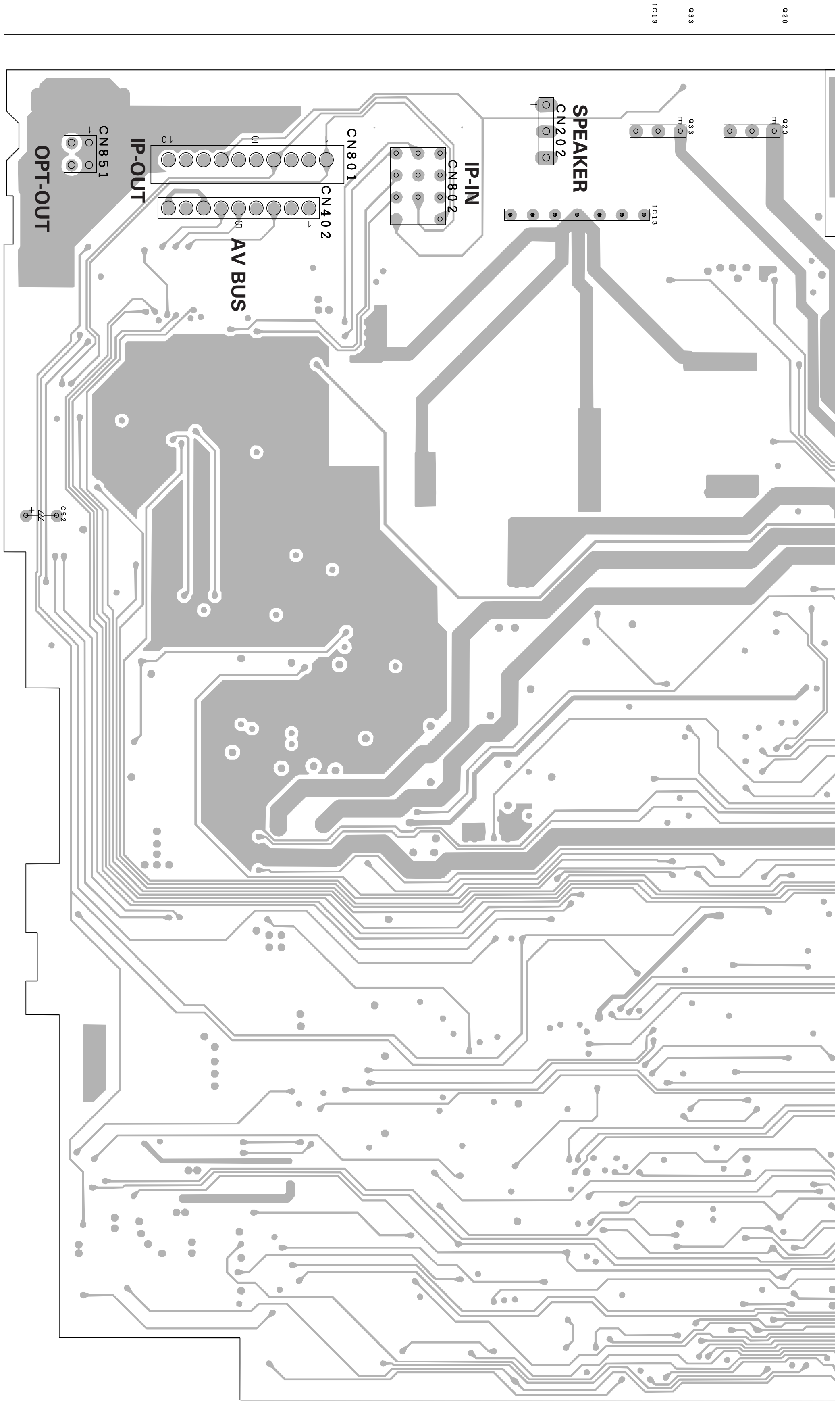
A CONTROL PCB

A

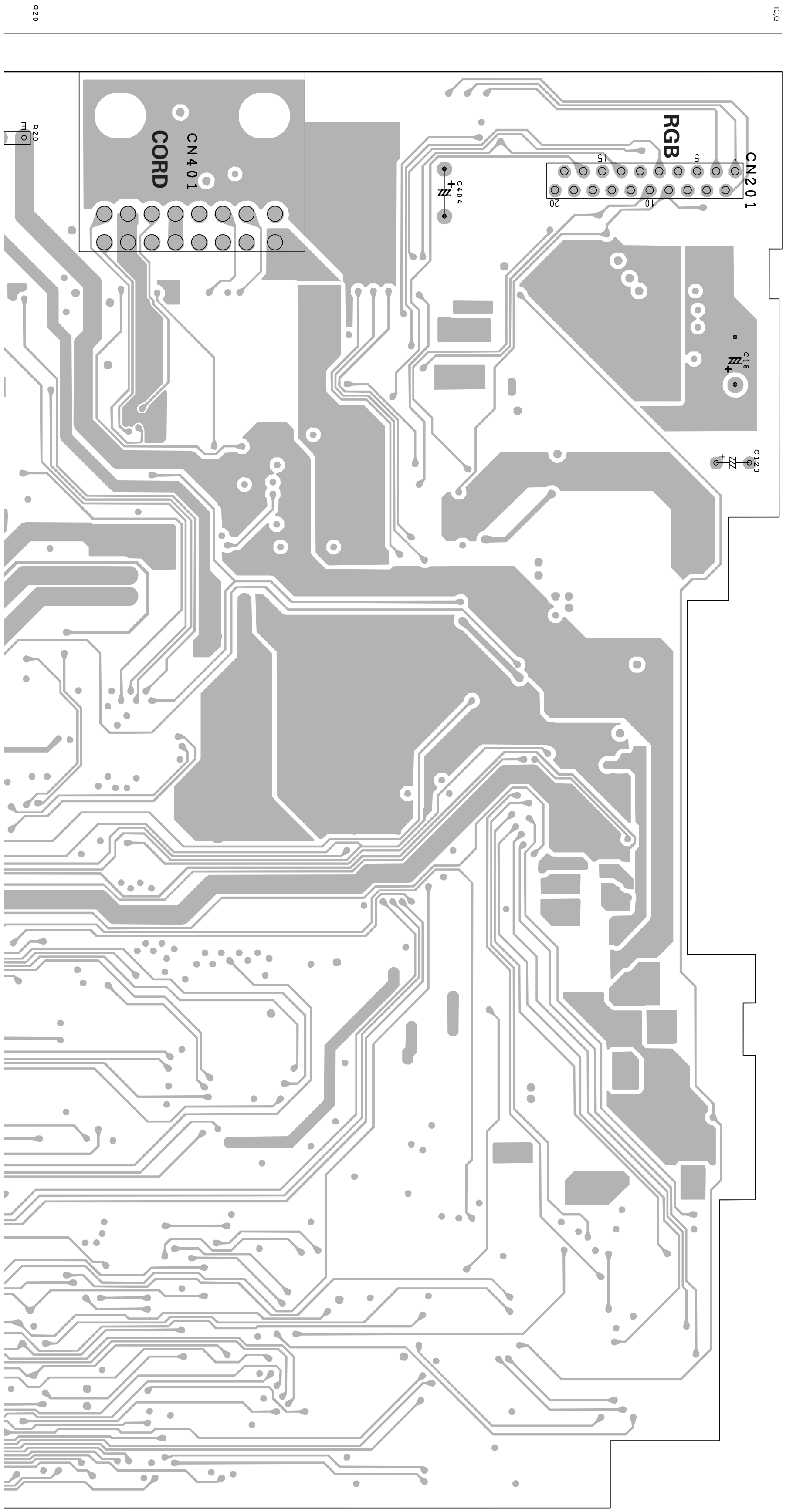
B

C

D


IC13
Q33
Q20
CN851
OPT-OUT
IP-OUT
CN801
CN402
AV BUS
IP-IN
CN802
SPEAKER
CN202
C52

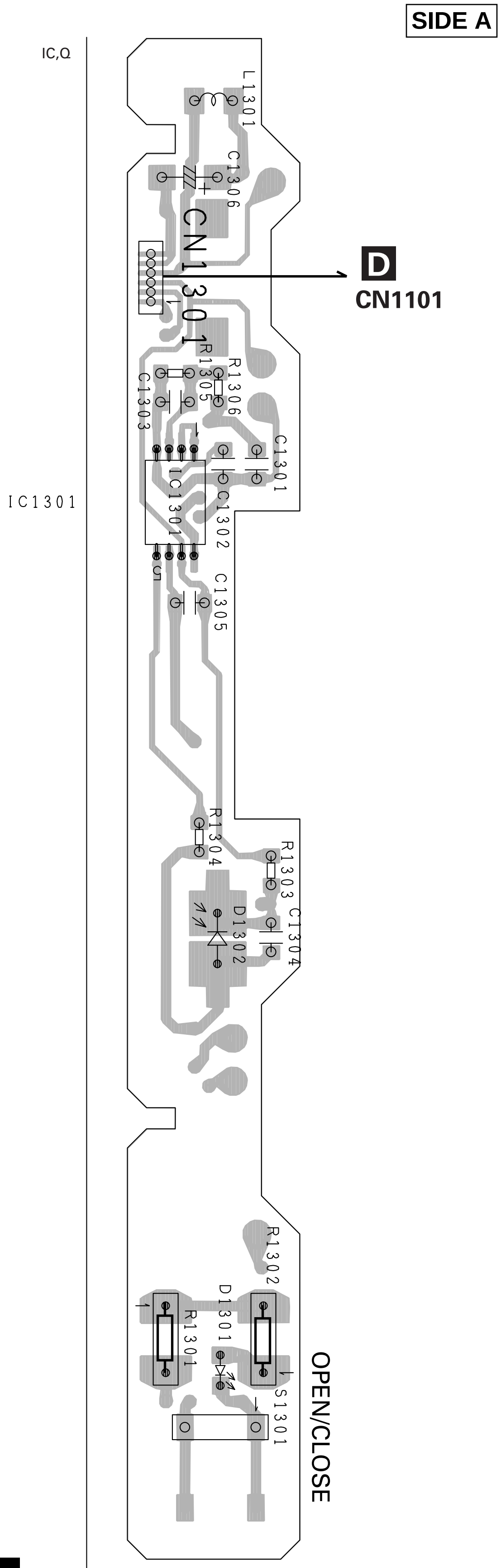
SIDE B


Q20
IC.Q
Q20
E
CN401
CORD
RGB
CN201
15
5
1
20
10
C404
C18
C120

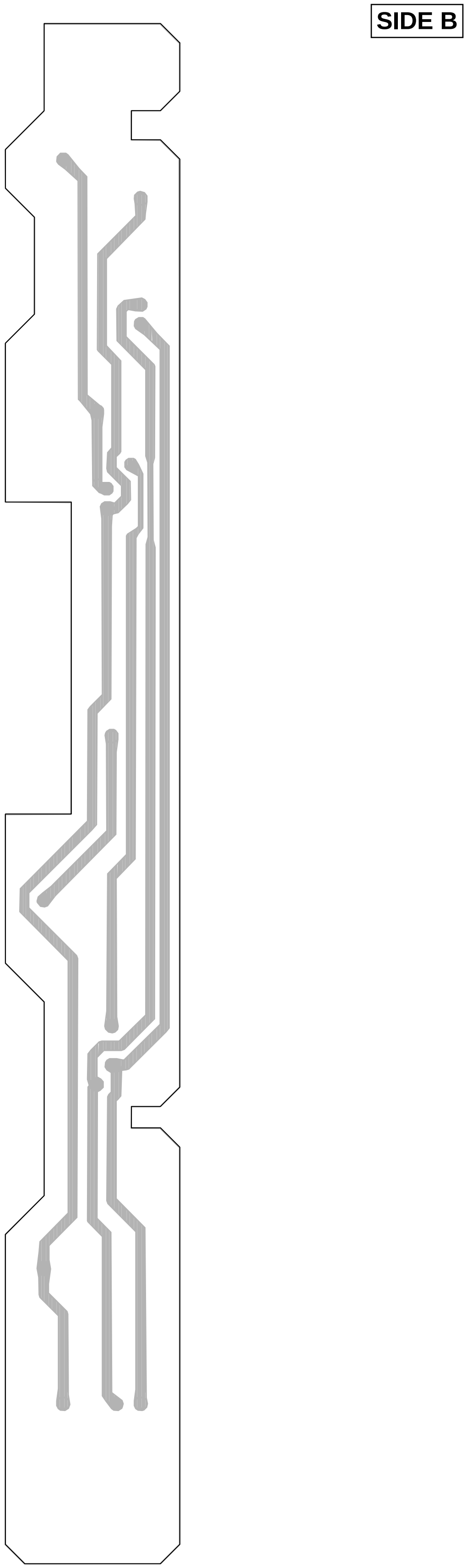
FRONT

4.2 PHOTO PCB

B
PHOTO PCB


SIDE A
IC,Q
IC1301
L1301
C1306
CN1301
D
CN1101
R1305
R1306
C1303
C1301
IC1301
C1302
C1305
R1304
R1303
D1302
C1304
R1302
D1301
R1301
S1301
OPEN/CLOSE

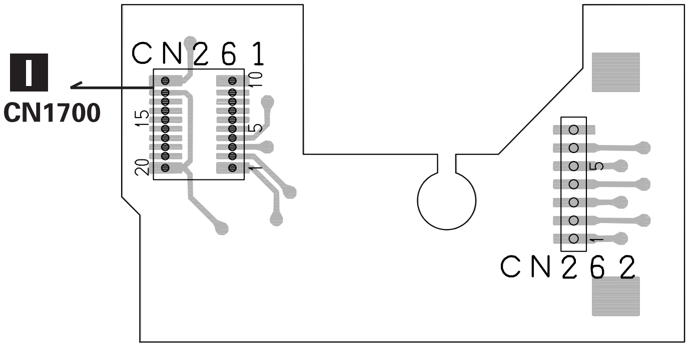
B
PHOTO PCB



4.3 EXTENSION PCB

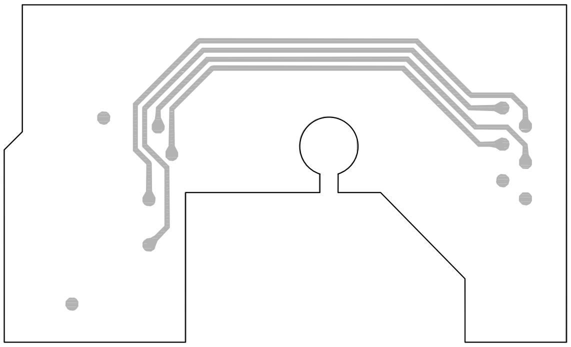
C
EXTENSION PCB

SIDE A

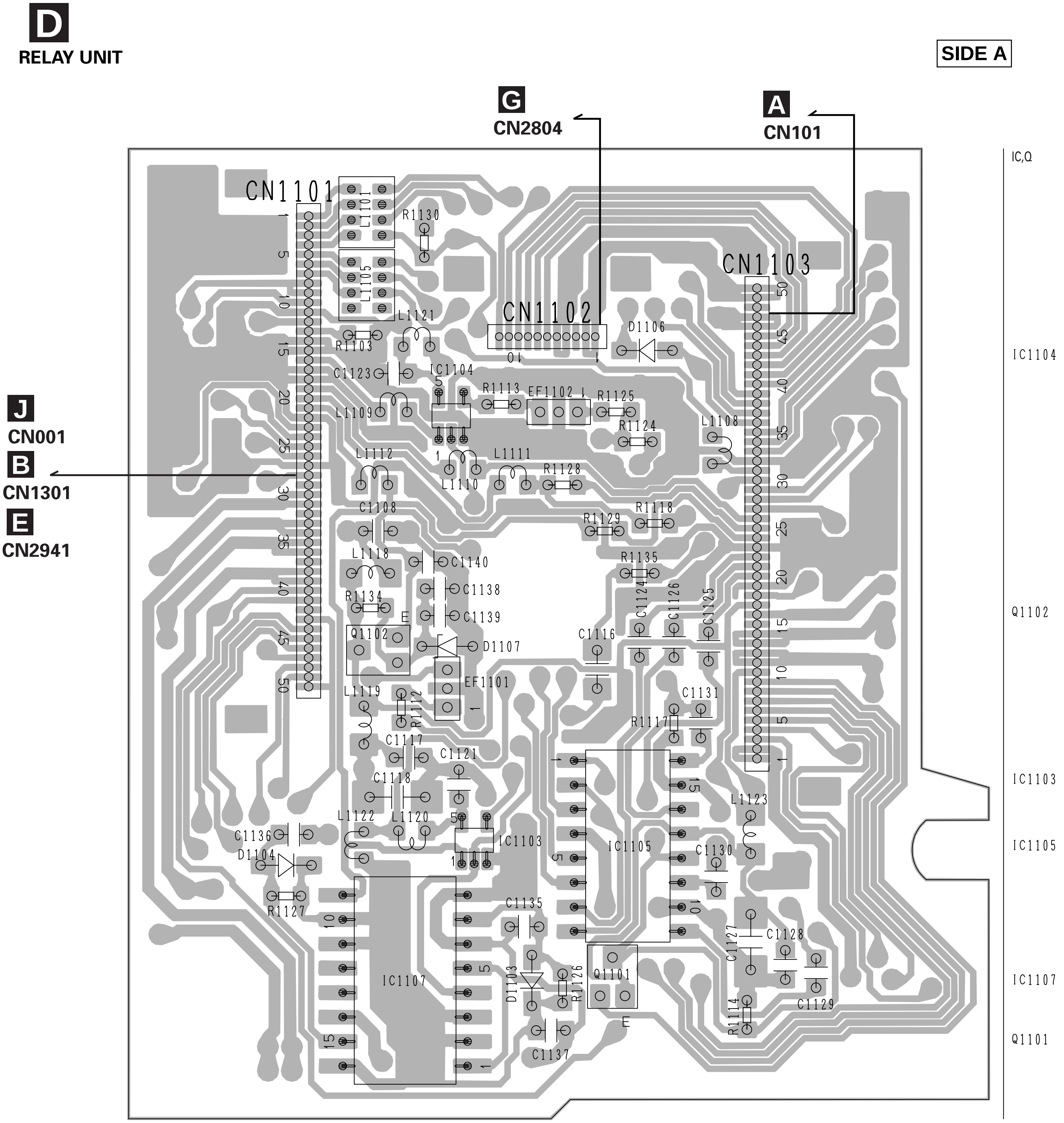

I
CN1700
CN261
10
15
5
20
1
5
1
CN262

C
EXTENSION PCB

SIDE B



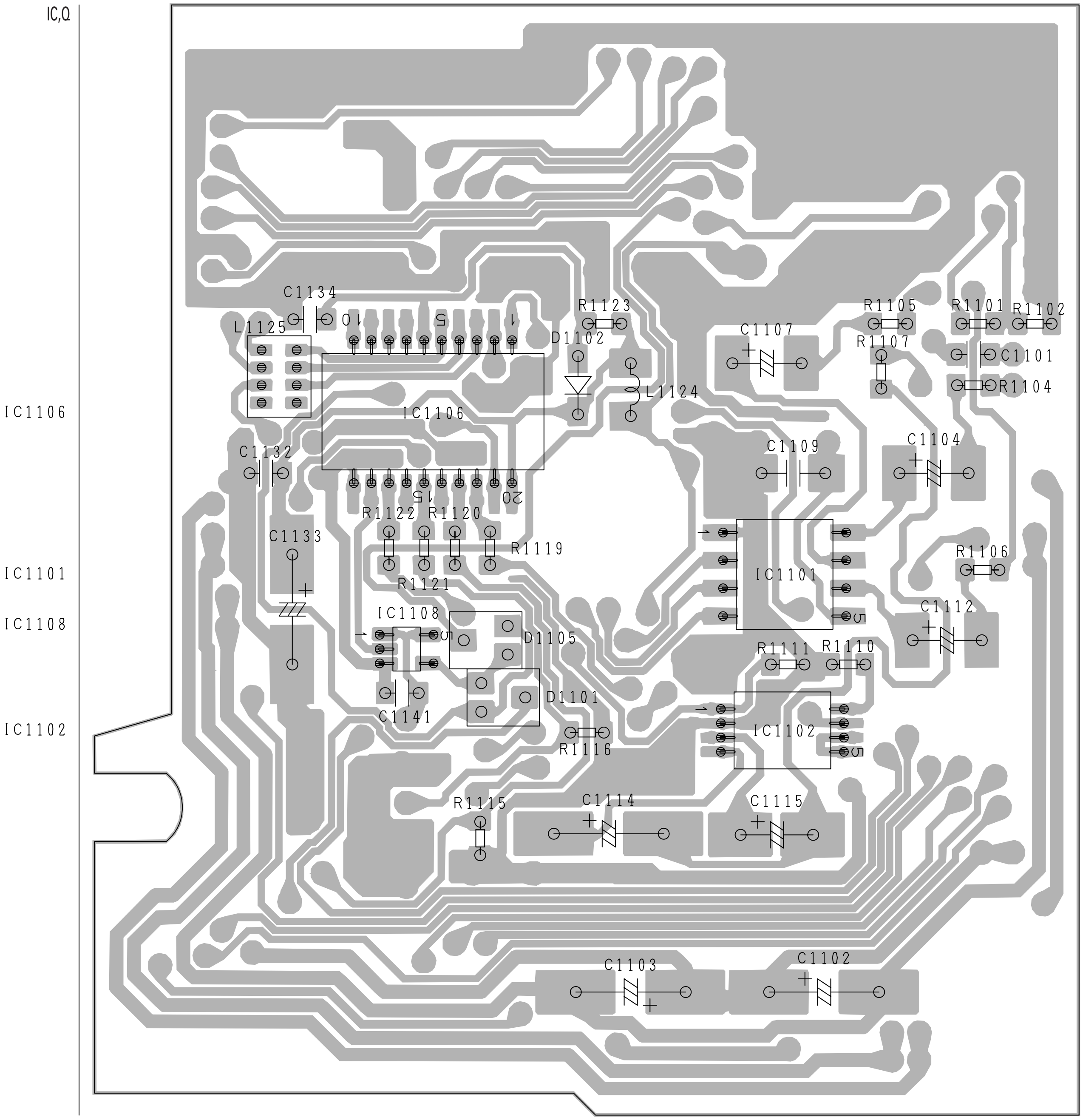
4.4 RELAY UNIT


D
RELAY UNIT
SIDE A
G
CN2804
A
CN101
J
CN001
B
CN1301
E
CN2941
CN1101
CN1102
CN1103
IC1104
IC1103
IC1105
IC1107
Q1101
Q1102
L1101
L1105
L1108
L1109
L1110
L1111
L1112
L1118
L1119
L1120
L1121
L1122
L1123
R1103
R1112
R1113
R1114
R1117
R1118
R1124
R1125
R1126
R1127
R1128
R1129
R1130
R1134
R1135
C1108
C1116
C1117
C1118
C1121
C1123
C1124
C1125
C1126
C1127
C1128
C1129
C1130
C1131
C1135
C1136
C1137
C1138
C1139
C1140
D1103
D1104
D1106
D1107
EF1101
EF1102
E
IC,Q
IC1104
Q1102
IC1103
IC1105
IC1107
Q1101

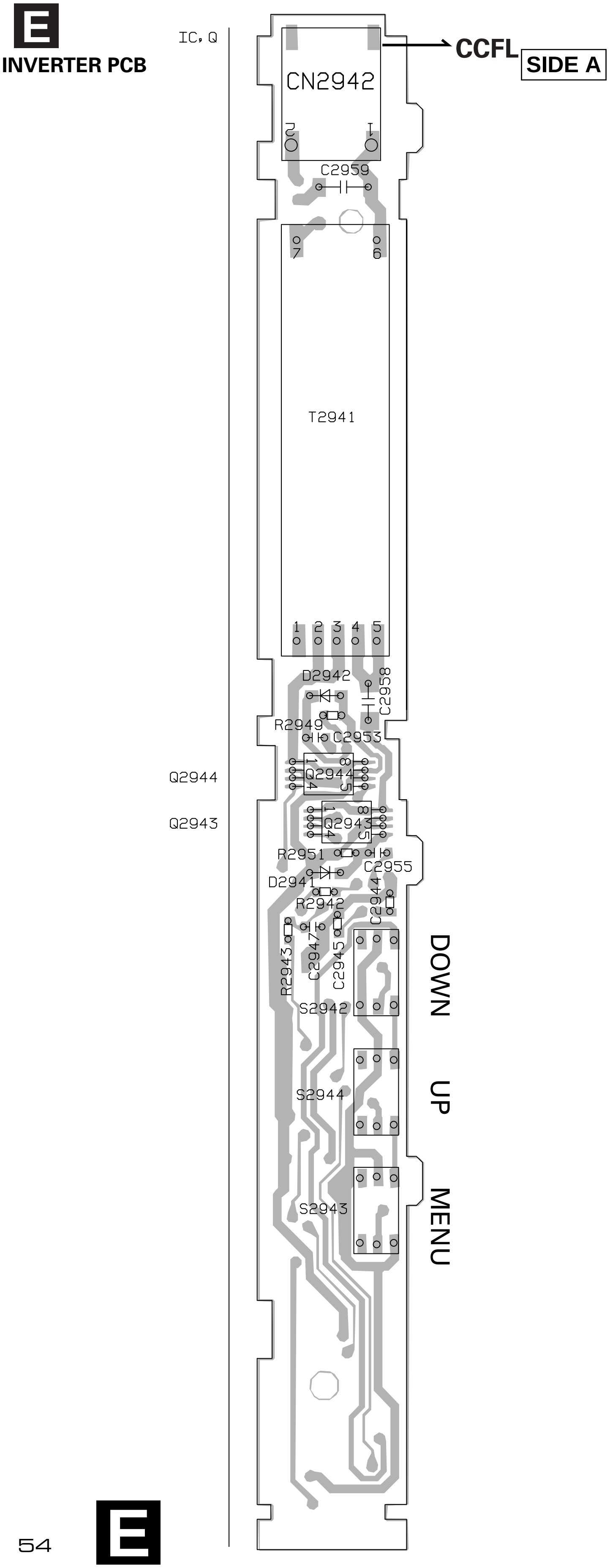
D

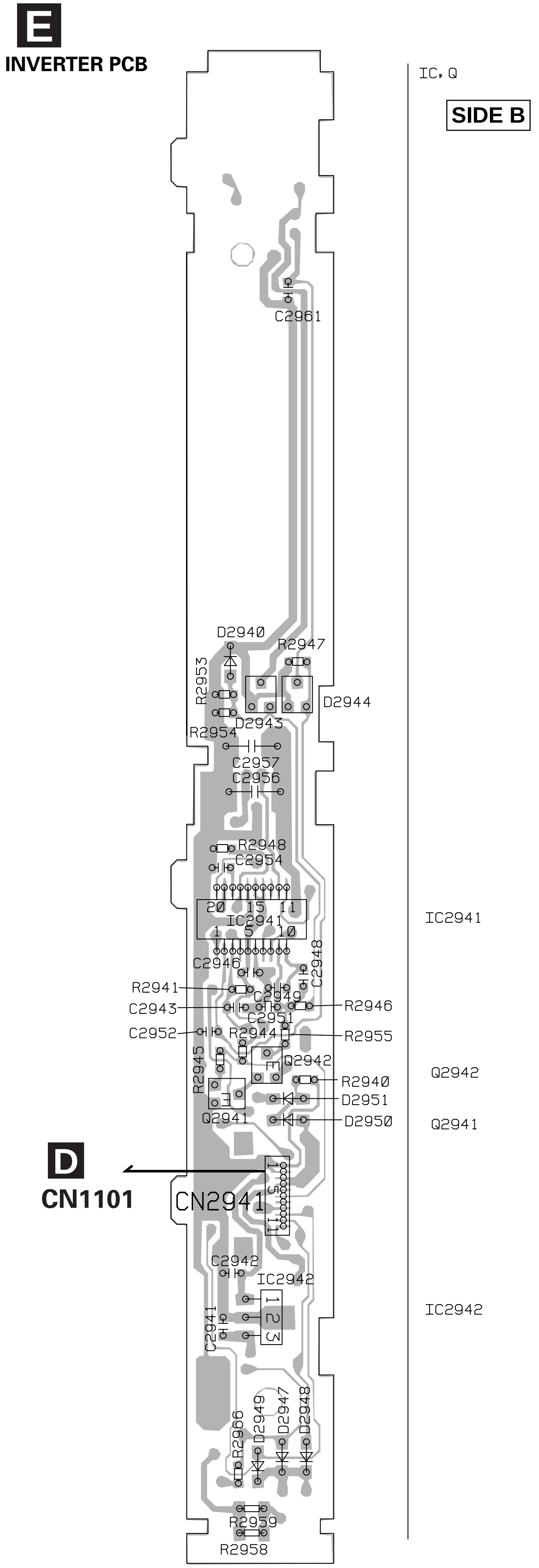
RELAY UNIT

SIDE B


IC,Q
IC1106
IC1101
IC1108
IC1102
C1134
L1125
10
5
1
R1123
D1102
L1124
IC1106
15
20
C1132
C1133
R1122
R1120
R1119
R1121
IC1108
5
D1105
D1101
C1141
R1116
R1115
C1114
C1115
R1105
R1101
R1102
R1107
C1101
R1104
C1107
C1109
C1104
IC1101
5
R1106
C1112
R1111
R1110
IC1102
5
C1103
C1102

4.5 INVERTER PCB


E
INVERTER PCB
IC, Q
CCFL
SIDE A
CN2942
C2959
T2941
D2942
C2958
R2949
C2953
Q2944
Q2943
R2951
C2955
D2941
R2942
C2944
R2943
C2947
C2945
S2942
DOWN
S2944
UP
S2943
MENU


E
INVERTER PCB
IC, Q
SIDE B
C2961
D2940
R2947
R2953
D2944
D2943
R2954
C2957
C2956
R2948
C2954
IC2941
C2946
C2948
R2941
C2943
C2949
R2946
C2951
C2952
R2944
R2955
R2945
Q2942
R2940
D2951
Q2941
D2950
D
CN1101
CN2941
C2942
IC2942
C2941
R2966
D2949
D2947
D2948
R2959
R2958

4.6 GRILLE PCB

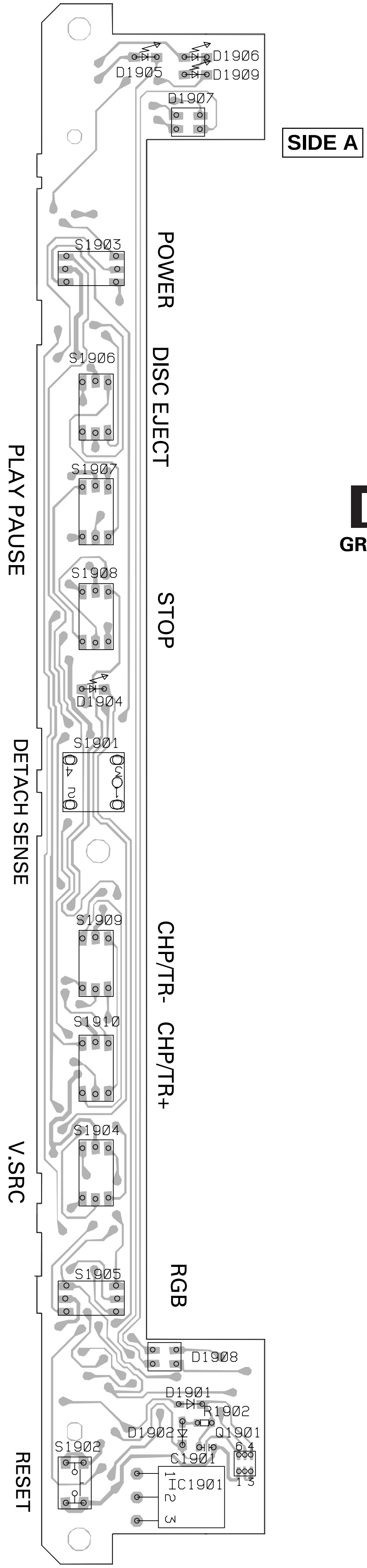
IC,Q

F

GRILLE PCB

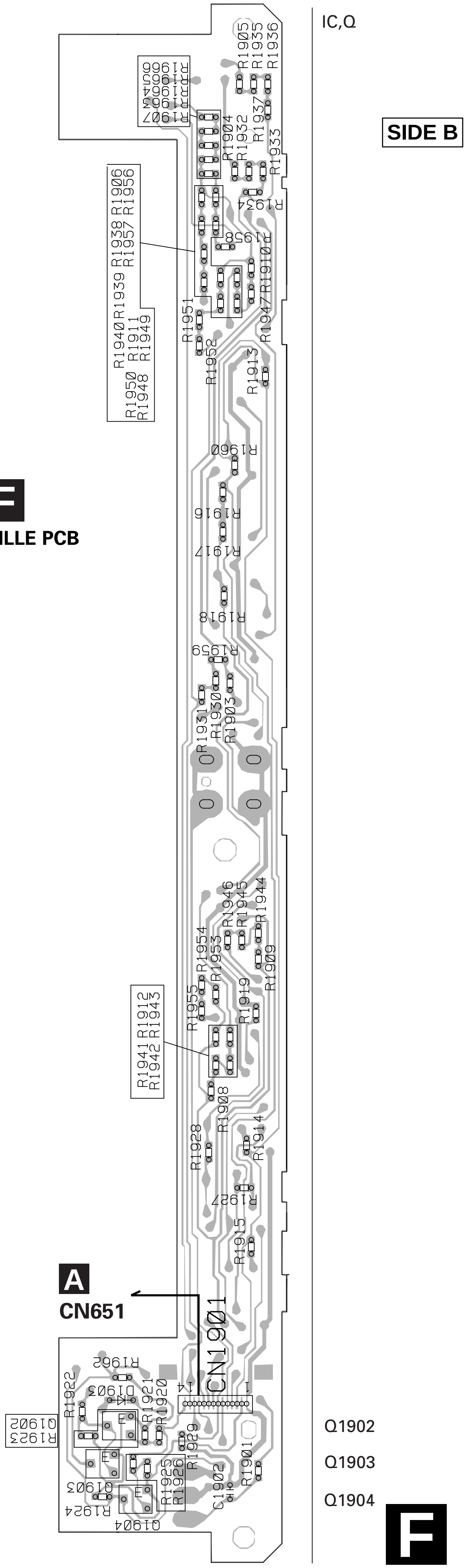
Q1901

IC1901


SIDE A
D1905
D1906
D1909
D1907
S1903
POWER
S1906
DISC EJECT
S1907
PLAY PAUSE
S1908
STOP
D1904
S1901
DETACH SENSE
S1909
CHP/TR-
S1910
CHP/TR+
S1904
V.SRC
S1905
RGB
D1908
D1901
R1902
D1902
Q1901
C1901
S1902
RESET
IC1901
64
13
1 2 3

F

GRILLE PCB


SIDE B
R1905
R1935
R1936
R1966
R1965
R1964
R1907
R1904
R1932
R1937
R1933
R1906 R1956
R1938 R1957
R1939
R1940 R1911
R1949
R1950 R1948
R1934
R1958
R1910
R1947
R1951
R1952
R1913
R1960
R1916
R1917
R1918
R1959
R1931
R1930
R1903
R1946
R1945
R1944
R1954
R1953
R1909
R1955
R1919
R1941 R1912
R1942 R1943
R1908
R1928
R1914
R1927
R1915
A
CN651
CN1901
R1962
R1922
D1903
R1921
R1920
Q1902
R1923
R1929
R1901
C1902
R1925
R1926
Q1903
R1924
Q1904

IC,Q

Q1902

Q1903

Q1904

A

B

C

D

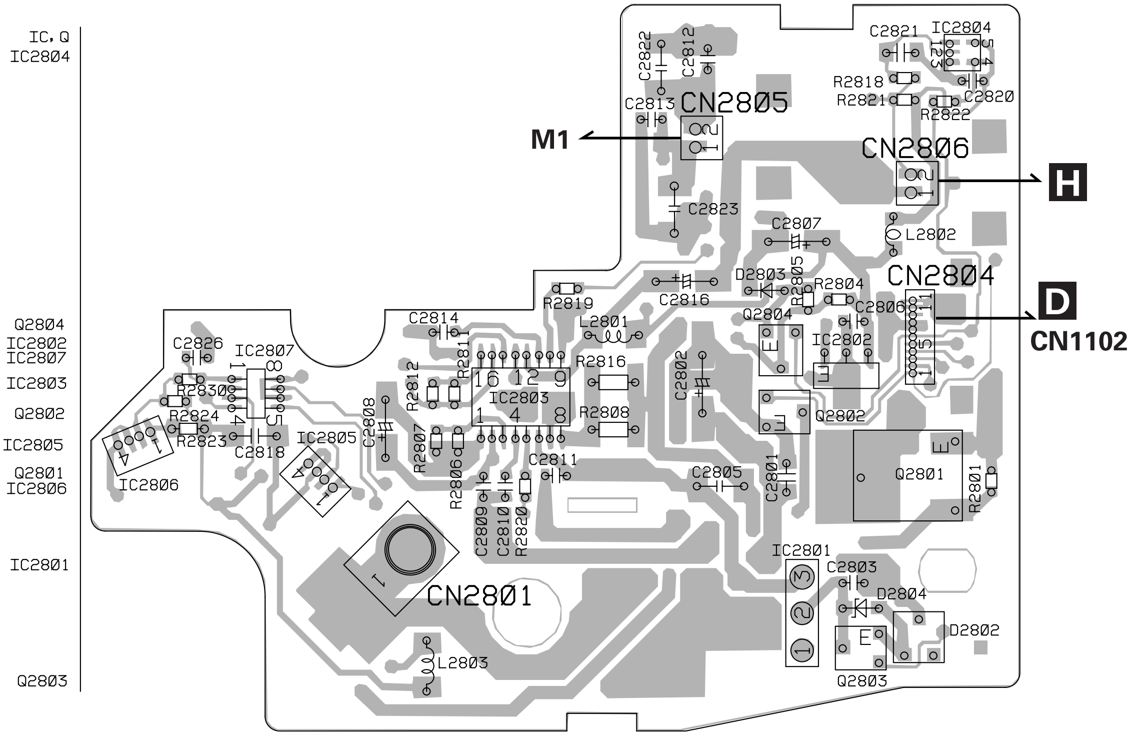
F

4.7 ENCODER PCB

G

ENCODER PCB

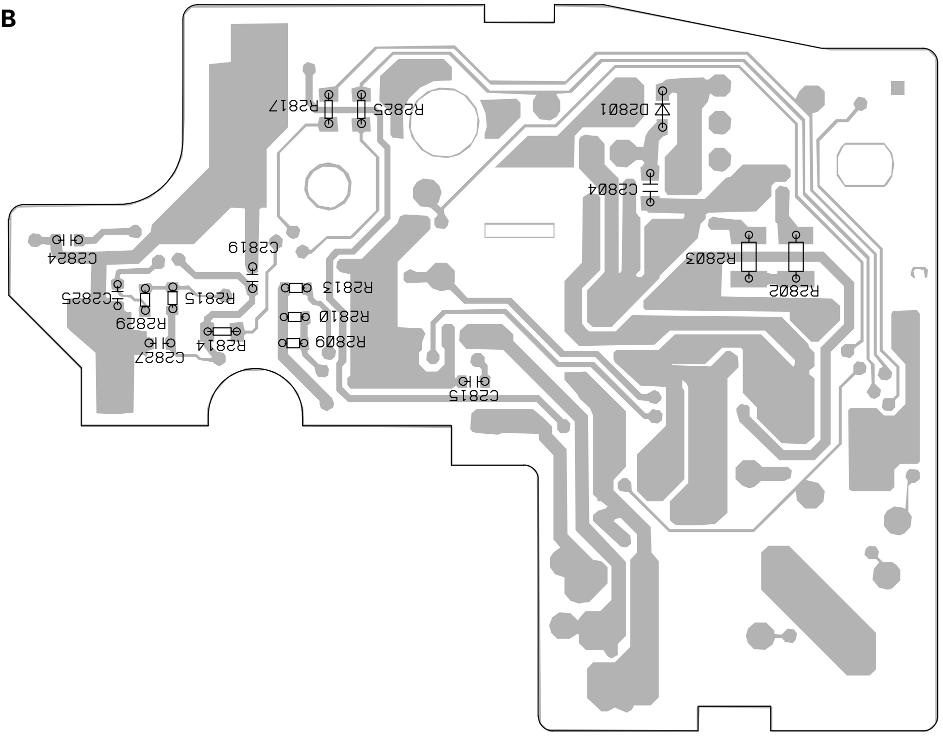
SIDE A


IC, Q
IC2804
Q2804
IC2802
IC2807
IC2803
Q2802
IC2805
Q2801
IC2806
IC2801
Q2803
M1
H
D
CN1102
CN2805
CN2806
CN2804
CN2801
C2821
C2822
C2812
C2813
C2820
R2818
R2821
R2822
C2823
C2807
L2802
D2803
R2805
R2804
C2816
R2819
C2814
C2826
L2801
C2806
Q2804
IC2802
R2816
R2808
C2802
R2830
R2824
R2823
C2818
C2808
R2812
R2811
R2807
R2806
C2811
C2809
C2810
R2820
C2805
C2801
Q2801
R2801
Q2802
IC2801
C2803
D2804
D2802
Q2803
L2803
IC2806
IC2805

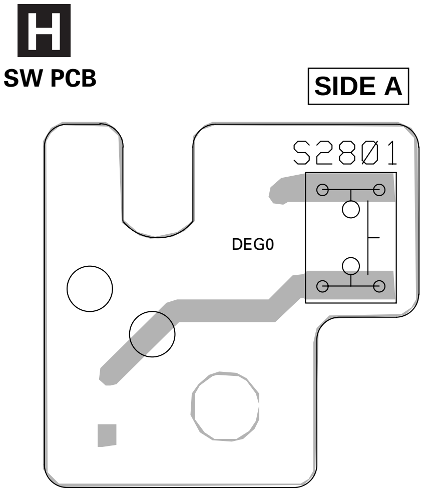
G

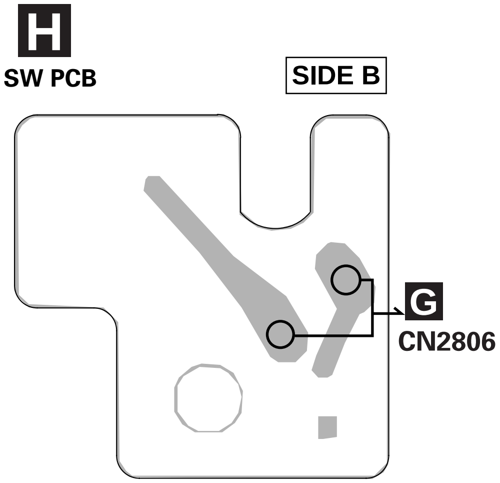
ENCODER PCB

SIDE B


R2817
R2825
D2801
C2804
C2824
C2819
C2825
R2815
R2813
R2829
R2810
R2814
R2809
C2827
C2815
R2803
R2802

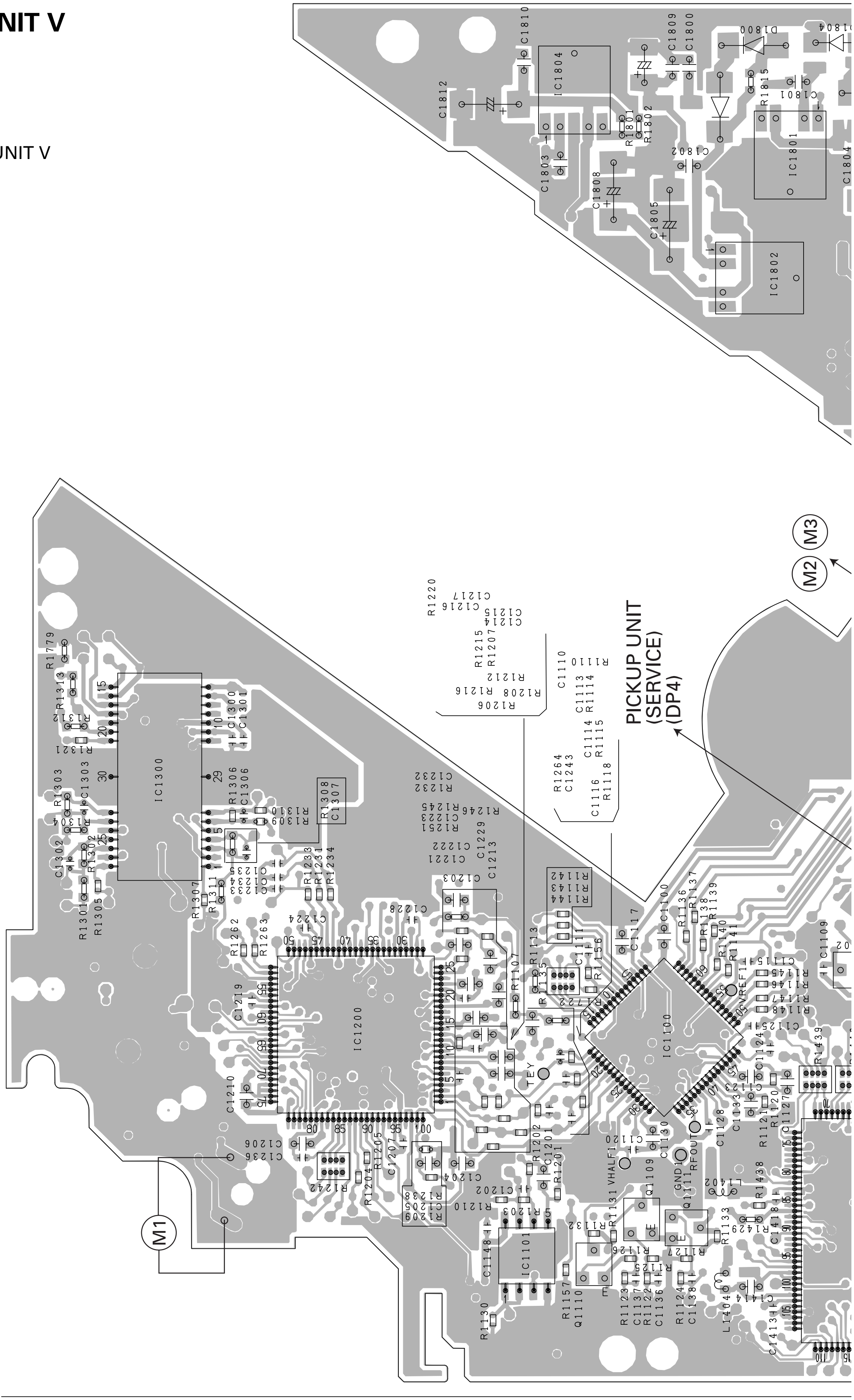
4.8 SW PCB


H
SW PCB
SIDE A
S2801
DEG0


H
SW PCB
SIDE B
G
CN2806

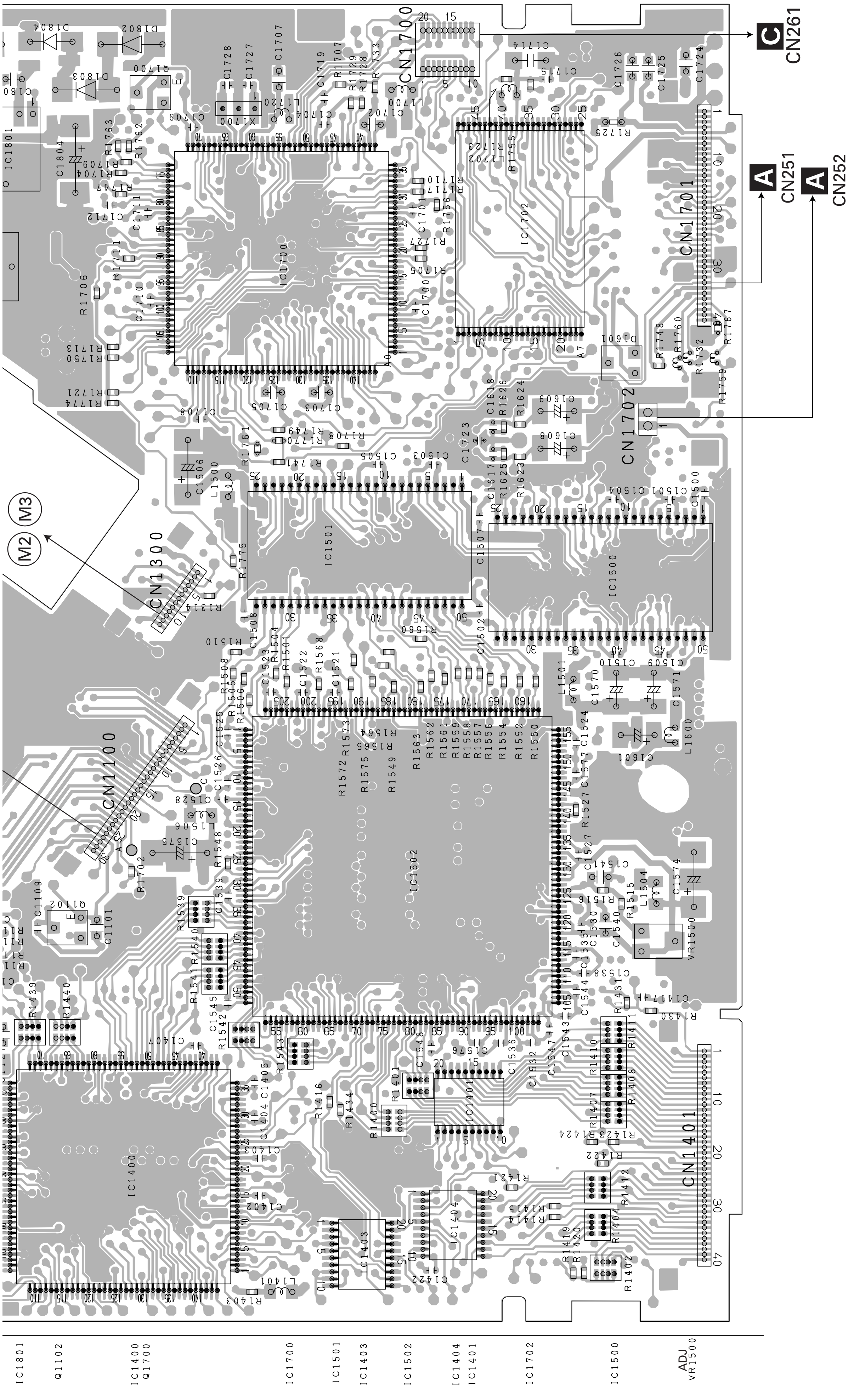
4.9 DVD CORE UNIT V

I DVD CORE UNIT V


PICKUP UNIT
(SERVICE)
(DP4)
M1
M2
M3
IC1300
IC1200
IC1100
IC1101
IC1801
IC1802
IC1804
Q1109
Q1110
Q1111
TEY
VHALF
RFOUT
GND
VREF
C1800
C1801
C1802
C1803
C1804
C1805
C1808
C1809
C1810
C1812
D1800
D1804
R1801
R1802
R1815
R1779
R1313
R1312
R1321
R1303
R1304
R1302
R1301
R1305
C1300
C1301
C1302
C1303
C1306
C1307
R1306
R1308
R1309
R1310
R1307
R1311
C1233
C1234
C1235
R1231
R1233
R1234
R1262
R1263
C1224
C1228
C1219
C1210
C1206
C1236
R1242
R1204
R1205
C1207
C1204
C1205
C1238
R1209
R1210
C1202
C1203
R1203
C1201
R1201
R1202
C1130
C1120
C1148
R1130
R1157
R1132
R1131
R1126
R1125
R1127
R1123
C1137
R1122
C1136
R1124
C1138
L1404
C1414
C1413
R1429
C1418
R1133
L1402
R1438
R1121
R1120
C1127
C1128
C1133
C1123
C1124
C1125
R1439
R1145
R1146
R1147
R1148
C1115
R1140
R1141
R1136
R1137
R1138
R1139
C1100
C1117
R1156
C1111
C1122
R1113
R1135
R1107
R1142
R1143
R1144
C1109
R1220
C1217
C1216
C1215
C1214
R1215
R1207
R1212
R1208
R1216
R1206
C1110
R1110
C1113
R1114
C1114
R1115
R1264
C1243
C1116
R1118
C1232
R1232
R1245
R1246
C1223
R1251
C1229
C1222
C1221
C1213
C1203

IC,Q IC1300 IC1200 IC1101 IC1804 Q1110 Q1109 IC1100 Q1111 IC1802 IC1801 Q1102

SIDE A

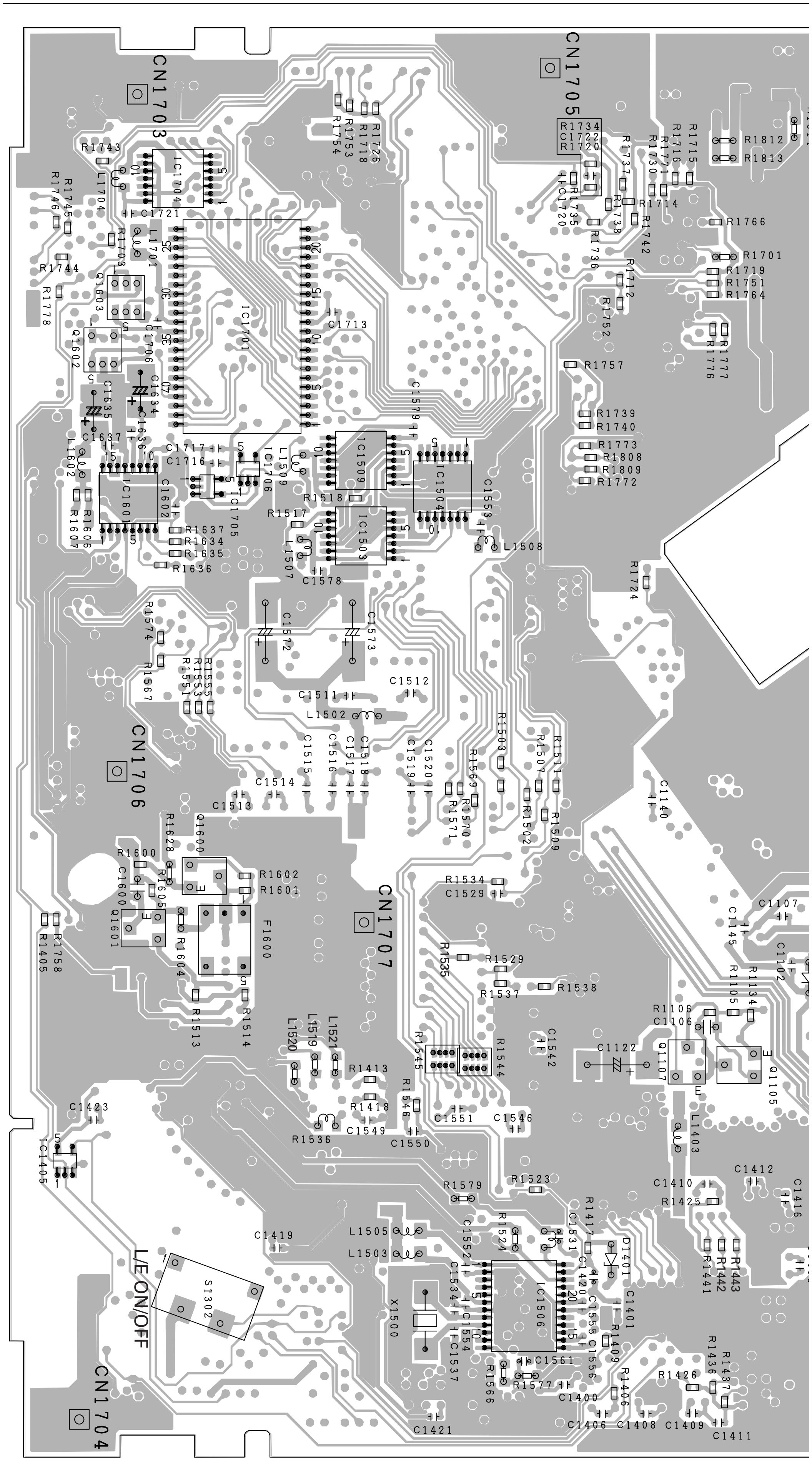

C
CN261
A
CN251
A
CN252
M2
M3
CN1700
CN1701
CN1702
CN1300
CN1100
CN1401
IC1700
IC1702
IC1501
IC1500
IC1502
IC1400
IC1401
IC1403
IC1404
IC1801
VR1500
IC1801
Q1102
IC1400
Q1700
IC1700
IC1501
IC1403
IC1502
IC1404
IC1401
IC1702
IC1500
ADJ
VR1500

I

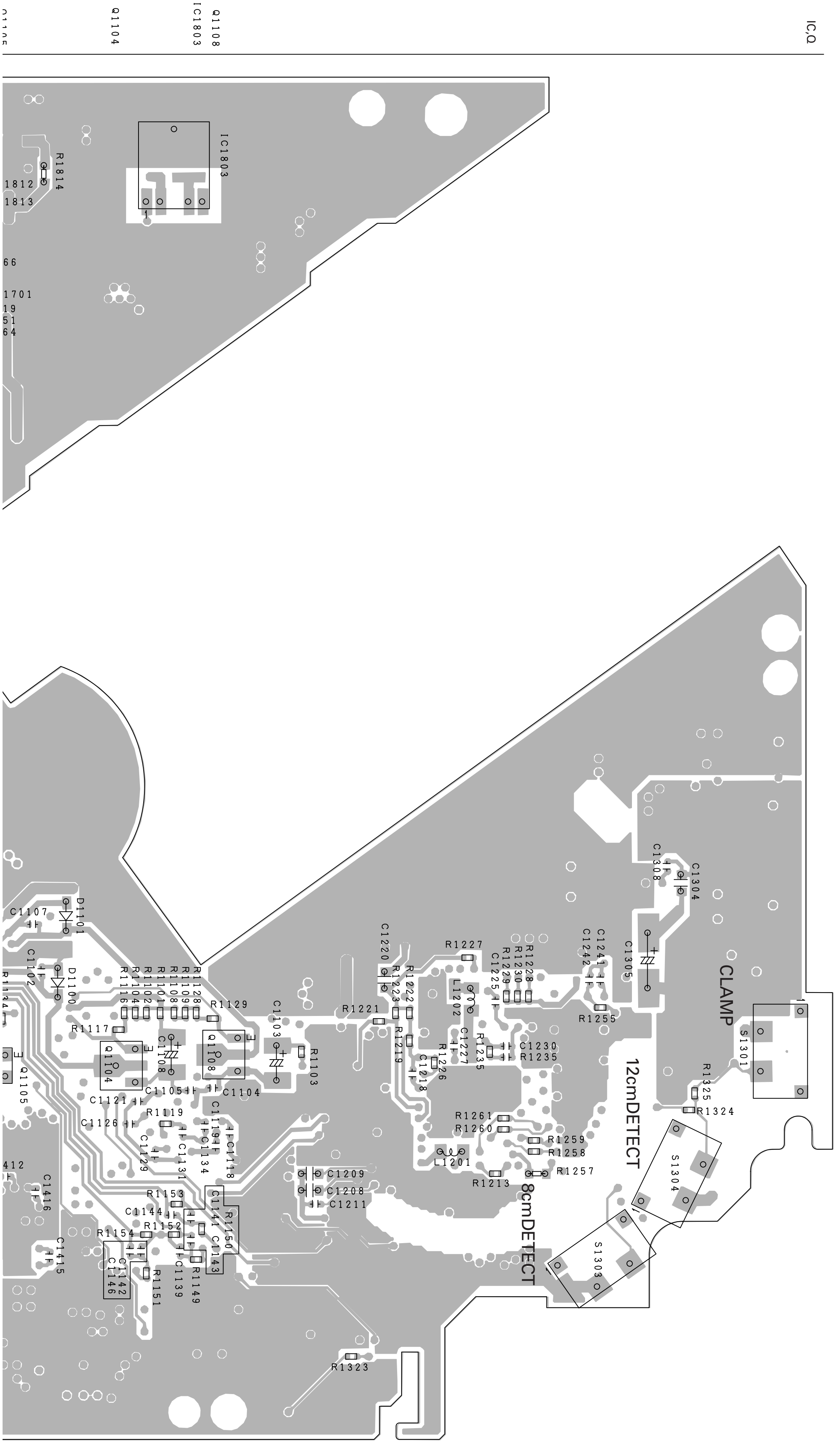
IC1405
Q1602
Q1603
IC1601
Q1601
IC1704
Q1600
IC1705
IC1701
IC1706
IC1509
IC1503
IC1504
IC1506
Q1107
Q1105

I DVD CORE UNIT V

A
B
C
D


CN1703
CN1705
CN1706
CN1707
CN1704
IC1704
IC1701
IC1601
IC1705
IC1706
IC1509
IC1503
IC1504
IC1506
IC1405
Q1603
Q1602
Q1600
Q1601
Q1107
Q1105
F1600
S1302
X1500
D1401
L/E ON/OFF
R1743
R1746
R1745
R1744
R1778
R1703
L1704
L1701
C1721
C1706
C1634
C1635
C1637
C1636
L1602
R1606
R1607
C1602
R1637
R1634
R1635
R1636
C1717
C1716
L1509
C1705
R1753
R1754
R1718
R1726
C1713
C1579
R1518
R1517
L1507
C1578
C1553
L1508
R1734
C1722
R1720
R1735
C1720
R1737
R1738
R1736
R1730
R1716
R1771
R1715
R1714
R1742
R1712
R1752
R1757
R1739
R1740
R1773
R1808
R1809
R1772
R1724
R1812
R1813
R1766
R1701
R1719
R1751
R1764
R1777
R1776
R1574
R1567
R1551
R1553
R1555
C1572
C1573
C1511
C1512
L1502
C1515
C1516
C1517
C1518
C1519
C1520
C1514
C1513
R1503
R1569
R1570
R1571
R1507
R1502
R1511
R1509
C1140
R1628
R1600
C1600
R1605
R1602
R1601
R1604
R1405
R1758
R1513
R1514
R1534
C1529
R1535
R1529
R1537
R1538
C1107
C1145
C1102
R1105
R1134
R1106
C1106
C1122
C1542
R1545
R1544
L1520
L1519
L1521
R1413
R1418
R1546
C1551
C1546
C1549
C1550
R1536
L1403
C1412
C1410
R1425
C1416
C1423
C1419
L1505
L1503
R1579
R1523
R1524
C1552
C1531
R1417
C1534
C1554
C1537
C1420
C1555
C1556
C1401
R1409
R1441
R1442
R1443
C1561
R1566
R1577
C1400
R1406
R1426
R1436
R1437
C1421
C1406
C1408
C1409
C1411

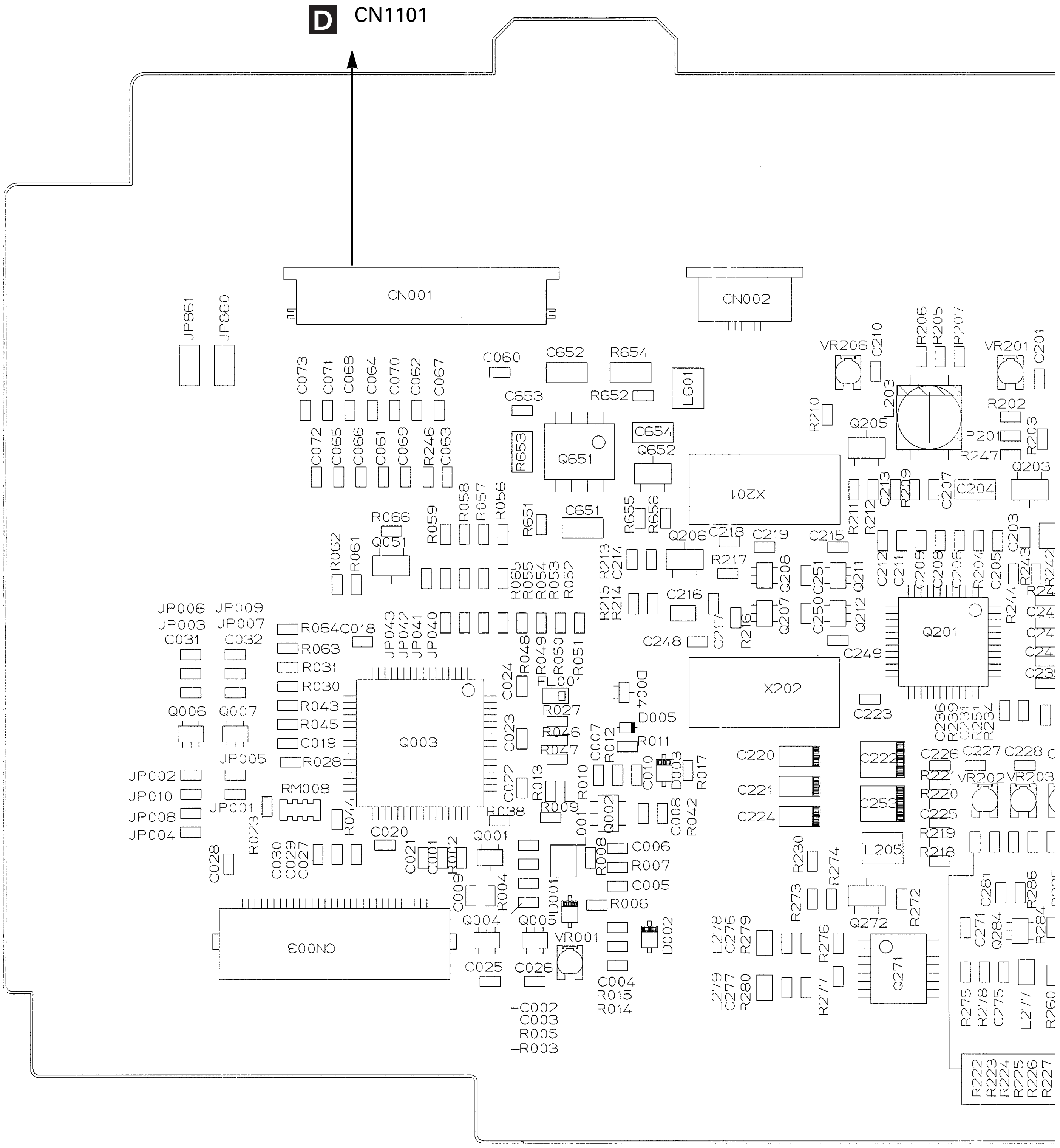
SIDE B

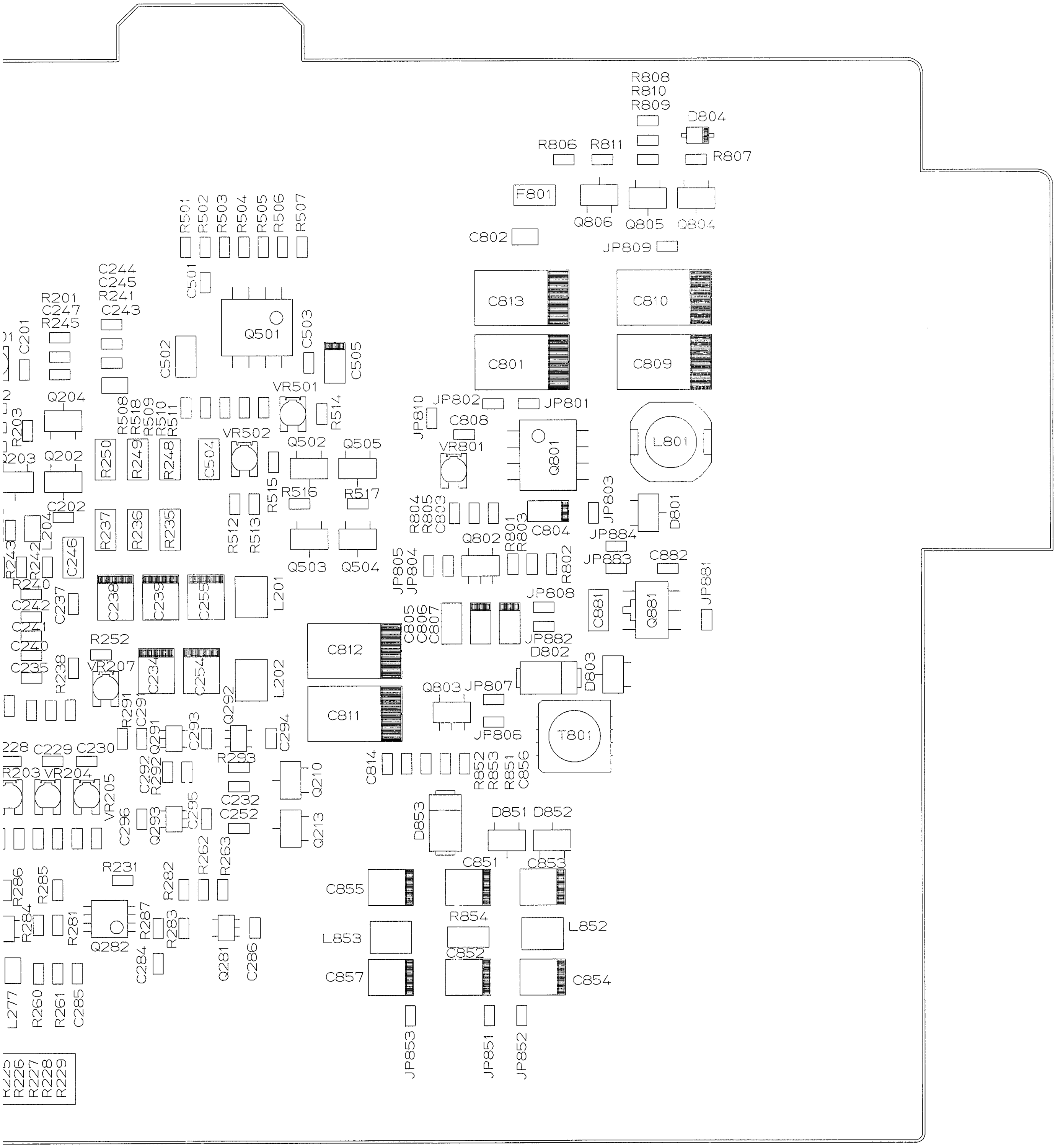

Q1104
IC1803
Q1108
IC,Q
R1814
1812
1813
66
1701
19
51
64
C1107
D1101
C1102
D1100
R1116
R1104
R1102
R1101
R1108
R1109
R1128
R1129
R1117
Q1104
C1108
Q1108
C1103
R1103
Q1105
C1121
C1105
C1104
C1126
R1119
C1129
C1119
C1134
C1118
C1131
412
C1416
R1153
C1144
R1152
C1141
C1143
R1150
R1154
C1142
C1146
R1151
R1149
C1139
C1415
C1220
R1227
R1222
R1223
R1219
R1221
L1202
C1225
R1229
R1230
R1228
C1227
R1235
C1230
R1226
C1218
C1209
C1208
C1211
R1261
R1260
L1201
R1213
R1259
R1258
R1257
C1241
C1242
C1305
R1255
C1308
C1304
CLAMP
S1301
12cmDETECT
R1325
R1324
S1304
8cmDETECT
S1303
R1323

A
B
C
D

4.10 VIDEO SCHEMATIC

J VIDEO SCHEMATIC


D CN1101
CN001
CN002
CN003
JP861
JP860
C073 C071 C068 C064 C070 C062 C067
C072 C065 C066 C061 C069 R246 C063
C060
C652
R654
C653
R652
L601
R653
Q651
C654
Q652
X201
X202
VR206
C210
R206 R205 R207
VR201
C201
L203
R210
Q205
R202
JP201
R247
R203
Q203
C213 R209 C207 C204
R211 R212
R066
Q051
R059 R058 R057 R056
R651
C651
R655 R656
Q206
C218 C219 C215
R062 R061
R065 R055 R054 R053 R052
R215 R213 R214 C214
R217
Q208 Q207
C251 C250
Q211 Q212
C212 C211 C209 C208 C206 R204 C205 C203 R243 R242 R244
C216
C217
R216
C248
C249
Q201
JP006 JP009
JP003 JP007
C031 C032
R064 C018
R063
R031
R030
R043
R045
C019
R028
JP043 JP042 JP041 JP040
R048 R049 R050 R051
C024
FL001
D004
Q003
Q006 Q007
JP005
JP002
JP010
JP008
JP004
JP001
RM008
R023
R044
C023
R027
R026
R047
D005
R011
C007 R012
C223
C236 R239 C231 R251 R234
C220
C221
C224
C222
C253
C226 C227 C228
R221 VR202 VR203
R220
R225
R219
R218
L205
C022 R013 R010
C010 D003 R017
C008 R042
Q002
R009
R038
C020
Q001
C021 C001 R002
C028
C030 C029 C027
C009 R004
D001
R008
C006
R007
C005
R006
D002
Q004 Q005
VR001
C025 C026
C004
R015
R014
C002
C003
R005
R003
R230 R274
R273 R272
Q272
L278 C276 R279
R276
Q271
L279 C277 R280
R277
C281 R286
C271 Q284 R284
R275 R278 C275 L277 R260
R222 R223 R224 R225 R226 R227


R808
R810
R809
D804
R806
R811
R807
F801
Q806
Q805
Q804
C802
JP809
R501
R502
R503
R504
R505
R506
R507
C501
C244
C245
R241
C243
R201
C247
R245
C201
Q501
C503
C502
C505
C813
C810
C801
C809
Q204
R203
R508
R518
R509
R510
R511
VR501
R514
JP810
JP802
JP801
C808
VR801
L801
Q801
Q202
R250
R249
R248
C504
VR502
Q502
Q505
R515
R516
R517
C202
L204
C246
R237
R236
R235
R512
R513
Q503
Q504
R804
R805
C803
C804
JP803
D801
JP884
R801
R803
Q802
R802
JP805
JP804
JP883
C882
JP881
R243
R242
R240
C242
C237
C238
C239
C255
L201
JP808
C881
Q881
C805
C806
C807
JP882
C241
C240
R252
C812
D802
D803
C235
R238
VR207
C234
C254
L202
Q292
Q803
JP807
C811
R291
C291
Q291
C293
C294
JP806
T801
C229
C230
R293
C814
R852
R853
R851
C856
R203
VR204
C292
R292
Q210
VR205
C232
C252
C296
Q293
C295
D853
D851
D852
Q213
R262
R263
C851
C853
R231
R286
R285
R282
C855
R284
R281
R287
R283
Q282
R854
L853
L852
C284
Q281
C286
C852
C857
C854
L277
R260
R261
C285
JP853
JP851
JP852
R225
R226
R227
R228
R229

5. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.
  - Chip Resistor
    - RS1/○S○○○J,RS1/○○S○○○J
  - Chip Capacitor (except for CQS.....)
    - CKS....., CCS....., CSZS.....

Control Unit

Consists of
Control PCB
Photo PCB
Extension PCB

A B C

Unit Number : CWM7738(UC)
CWM7737(EW)
CWM7740(ES/RD)
CWM7739(ES/RC)
Unit Name : Control Unit

MISCELLANEOUS

=====Circuit Symbol and No.===Part Name			Part No.
IC	13	IC	BP5250-1
IC	15	IC	BA00ASFP
IC	101	IC	NJM2903V
IC	103	IC	TC74VHCT08AFT
IC	251	IC	TC74VHCT08AFT
IC	252	IC	TC74VHC08FT
IC	301	IC	TC74HC123AF
IC	302	IC	TC7W34FU
IC	303	IC(EW,ES/RD,ES/RC)	BA7071F
IC	304	IC	NJM2267V
IC	305	IC	NJM2233BM
IC	306	IC	NJM2233BM
IC	307	IC	NJM2235V
IC	308	IC	NJM2267V
IC	309	IC	NJM2235V
IC	501	IC	NJM2068MD
IC	502	IC	BA3131FS
IC	602	IC	PE5230A
IC	603	IC	S-80734ANDYI
IC	604	IC	M62354GP
IC	605	IC	TC74VHCT08AFT
IC	701	IC	PE5285A
IC	801	IC	TA2050F
IC	802	IC	HA12187FP
IC	851	IC	TC7WT125FU
IC	1301	IC	NJM062V
Q	11	Transistor	2SC2412K
Q	12	Transistor	2SA1037K
Q	13	Transistor	2SA1036K
Q	14	Transistor	IMD2A
Q	15	Transistor	2SD1767
Q	16	Transistor	2SC2412K
Q	17	Transistor	2SA1797
Q	18	Transistor	2SJ529S
Q	19	Transistor	DTA114EK
Q	20	Transistor	2SD2396
Q	21	Transistor	IMD2A
Q	22	Transistor	2SD1760F5
Q	23	Transistor	IMD2A
Q	24	Transistor	2SD1760F5
Q	25	Transistor	2SA1797
Q	26	Transistor	2SA1036K
Q	27	Transistor	2SC2412K
Q	28	Transistor	DTC114EK
Q	29	Transistor	DTC114EK
Q	30	Transistor	2SA1037K
Q	31	Transistor	2SC2412K
Q	32	Transistor	DTC114EK
Q	33	Transistor	2SD2396
Q	34	Transistor	IMD2A
Q	35	Transistor	DTC124EK
Q	36	Transistor	IMD2A
Q	37	Transistor	2SC2412K
Q	39	Transistor	2SA1036K
Q	40	Transistor	DTC143EK
Q	201	Transistor	DTC124EK
Q	202	Transistor	2SC2412K
Q	203	Transistor	2SC2412K
Q	251	Transistor	2SA1036K
Q	252	Transistor	2SC2412K
Q	401	Transistor	2SC2412K
Q	403	Transistor	DTC124EK
Q	404	Transistor	IMX1
Q	405	Transistor	2SA1037K
Q	501	Transistor	IMD2A
Q	502	Transistor	FMG12
Q	503	Transistor	IMD2A
Q	504	Transistor	FMG12
Q	602	Transistor	DTC114EK
Q	603	Transistor	DTC114EK
Q	604	Transistor	DTA114EK
Q	651	Transistor	2SC2412K
Q	652	Transistor	2SC2412K
Q	653	Transistor	2SC2412K
Q	701	Transistor	DTA144EK
Q	851	Transistor	DTA123EU
Q	852	Transistor	DTC114EK
Q	853	Transistor	2SC2412K
D	12	Diode	F2J4S
D	13	Diode	UDZS8R2(B)
D	15	Diode	SC016-2
D	16	Diode	UDZS5R6(B)
D	17	Diode	MA152WK
D	18	Diode	UDZS5R6(B)
D	19	Diode	MA152WK
D	21	Diode	SC802-06
D	22	Diode	SC016-2
D	23	Diode	MA111
D	24	Diode	F2J4S
D	25	Diode	SC016-2

=====Circuit Symbol and No.===Part Name			Part No.
D	26	Diode	UDZ9R1(B)
D	27	Diode	MA3091(L)
D	28	Diode	MA3056(H)
D	30	Diode	MA152WK
D	203	Diode	UDZ12(B)
D	204	Diode	UDZ12(B)
D	205	Diode	UDZ12(B)
D	206	Diode	UDZ12(B)
D	207	Diode	UDZ12(B)
D	208	Diode	UDZ12(B)
D	209	Diode	UDZ12(B)
D	210	Diode	UDZS8R2(B)
D	212	Diode	UDZ12(B)
D	214	Diode	UDZ12(B)
D	301	Diode	MA111
D	302	Diode	MA111
D	303	Diode	UDZ12(B)
D	304	Diode	UDZ12(B)
D	401	Diode	UDZS8R2(B)
D	403	Diode	MA111
D	404	Diode	UDZ7R5(B)
D	405	Diode	MA152WK
D	406	Diode	UDZ12(B)
D	407	Diode	UDZ12(B)
D	408	Diode	SC016-2
D	409	Diode	UDZ12(B)
D	410	Diode	UDZ12(B)
D	411	Diode	UDZ12(B)
D	412	Diode	UDZ12(B)
D	413	Diode	UDZ12(B)
D	414	Diode	MA111
D	501	Diode	MA152WK
D	601	Diode	MA152WK
D	602	Diode	MA152WK
D	603	Diode	MA111
D	604	Diode	UDZ3R3(B)
D	652	Diode	MA152WK
D	1301	LED	CL190PGCD
D	1302	Photo-Diode	AM-30-21
L	14	Coil	CTH1246
L	15	Coil	CTH1246
L	16	Coil	CTH1246
L	101	Inductor	CTF1305
L	102	Inductor	CTF1379
L	205	Inductor	CTF1305
L	206	Inductor	CTF1305
L	207	Inductor	CTF1305
L	208	Inductor	CTF1305
L	209	Inductor	CTF1305
L	210	Inductor	CTF1305
L	251	Inductor	CTF1305
L	252	Inductor	CTF1305
L	301	Inductor	CTF1379
L	302	Inductor	CTF1379
L	303	Inductor	CTF1379
L	304	Inductor	LCTB2R2K2125
L	305	Inductor(EW,ES/RD,ES/RC)	LCTB2R2K1608
L	306	Inductor	CTF1305
L	307	Inductor	CTF1305
L	308	Inductor	CTF1305
L	309	Inductor	CTF1305
L	310	Inductor	CTF1305
L	311	Inductor	CTF1305
L	401	Inductor	LCTB2R2K2125
L	402	Inductor	CTF1379

=====Circuit Symbol and No.===Part Name			Part No.
L	403	Inductor	CTF1379
L	404	Inductor	CTF1379
L	405	Inductor	CTF1379
L	406	Inductor	CTF1379
L	501	Inductor	CTF1399
L	502	Inductor	CTF1399
L	503	Inductor	CTF1410
L	504	Inductor	CTF1410
L	505	Inductor	CTF1410
L	506	Inductor	CTF1410
L	507	Inductor	CTF1410
L	601	Inductor	CTF1379
L	602	Inductor	CTF1379
L	603	Inductor	CTF1379
L	604	Inductor	CTF1379
L	605	Inductor	CTF1379
L	606	Inductor	CTF1379
L	607	Inductor	CTF1420
L	608	Inductor	CTF1379
L	609	Inductor	CTF1379
L	610	Inductor	CTF1379
L	611	Inductor	CTF1379
L	612	Inductor	CTF1379
L	613	Inductor	CTF1379
L	614	Inductor	CTF1379
L	615	Inductor	CTF1379
L	616	Inductor	CTF1379
L	617	Inductor	CTF1379
L	618	Inductor	CTF1379
L	619	Inductor	CTF1379
L	620	Inductor	CTF1379
L	621	Inductor(EW,ES/RD,ES/RC)	CTF1379
L	622	Inductor	CTF1410
L	623	Inductor	CTF1410
L	624	Inductor	CTF1410
L	625	Inductor	CTF1399
L	626	Inductor	CTF1379
L	627	Inductor	CTF1379
L	628	Inductor	CTF1379
L	701	Inductor	CTF1379
L	702	Inductor	CTF1379
L	703	Inductor	CTF1379
L	704	Inductor	CTF1379
L	705	Inductor	CTF1379
L	706	Inductor	CTF1379
L	707	Inductor	CTF1379
L	708	Inductor	CTF1379
L	709	Inductor	CTF1379
L	710	Inductor	CTF1379
L	711	Inductor	CTF1420
L	712	Inductor	CTF1379
L	713	Inductor	CTF1379
L	714	Inductor	CTF1379
L	715	Inductor	CTF1399
L	716	Inductor	CTF1379
L	801	Inductor	CTF1399
L	803	Inductor	CTF1379
L	804	Inductor	CTF1379
L	851	Inductor	CTF1379
L	1301	Inductor	LCTB100K2125
X	601	Radiator 4.19MHz	CSS1436
X	701	Crystal Resonator 12.5829MHz	CSS1542
S	1301	Push Switch(OPEN/CLOSE)	CSG1126
FU	101	Fuse 3.15A	CEK1207
FU	102	Fuse 1A	CEK1191

=====Circuit Symbol and No.===Part Name			Part No.
FU	103	Fuse 1A	CEK1191
FU	104	Fuse 400mA	CEK1184
FU	105	Fuse 2A	CEK1190
FU	106	Fuse 3.15A	CEK1207
FU	201	Fuse 2A	CEK1190
FU	202	Fuse 2A	CEK1190
FU	203	Fuse 2A	CEK1190
FU	251	Fuse 2A	CEK1190
FU	252	Fuse 400mA	CEK1184
FU	253	Fuse 400mA	CEK1184
FU	401	Fuse 2A	CEK1190
FU	402	Fuse 2A	CEK1190
FU	403	Fuse 2A	CEK1190
FU	404	Fuse 2A	CEK1190
EF	301	EMI Filter	CCG1067
EF	302	EMI Filter	CCG1067
EF	303	EMI Filter	CCG1082
EF	304	EMI Filter	CCG1082
BZ	601	Buzzer	CPV1042
VR	1	Semi-fixed 470Ω(B)	CCP1388

RESISTORS

R	13		RS1/16S473J
R	14		RS1/16S102J
R	15		RS1/16S122J
R	16		RS1/16S473J
R	17		RS1/16S272J
R	18		RS1/16S103J
R	19		RS1/16S473J
R	20		RS1/16S473J
R	21		RS1/16S472J
R	22		RS1/16S180J
R	23		RS1/8S391J
R	25		RS1/16S3002D
R	26		RS1/16S1002D
R	27		RS1/16S182J
R	28		RS1/16S472J
R	29		RS1/16S222J
R	31		RS1/16S472J
R	33		RS1/16S822J
R	34		RS1/16S472J
R	35		RS1/16S473J
R	36		RS1/10S472J
R	37		RAB4C470J
R	38		RAB4C470J
R	40		RS1/16S470J
R	42		RS1/16S470J
R	43		RS1/16S102J
R	44		RS1/16S333J
R	45		RS1/16S104J
R	46		RS1/16S180J
R	47		RS1/16S180J
R	48		RS1/16S180J
R	49		RS1/16S180J
R	50		RS1/16S180J
R	51		RS1/16S332J
R	52		RS1/16S473J
R	53		RS1/16S1001D
R	54		RS1/16S3301D
R	55		RS1/16S2001F
R	56		RS1/16S4700D
R	57		RS1/16S153J
R	58		RS1/16S473J
R	59		RS1/16S473J
R	60		RS1/16S473J
R	61		RS1/16S0R0J
R	62		RS1/16S681J

=====Circuit Symbol and No.===Part Name			Part No.
R	65		RS1/16S473J
R	66		RS1/16S102J
R	101		RS1/16S102J
R	102		RS1/16S102J
R	103		RAB4C102J
R	104		RAB4C102J
R	105		RAB4C102J
R	106		RAB4C102J
R	107		RS1/16S102J
R	108		RAB4C221J
R	109		RS1/16S101J
R	110		RS1/16S102J
R	111		RS1/16S101J
R	112		RS1/16S103J
R	113		RS1/16S103J
R	114		RS1/16S392J
R	115		RS1/16S912J
R	116		RS1/16S2003F
R	117		RS1/16S153J
R	118		RS1/16S153J
R	119		RS1/16S102J
R	120		RS1/16S102J
R	121		RS1/16S0R0J
R	206		RS1/16S750J
R	207		RS1/16S750J
R	208		RS1/16S750J
R	209		RS1/16S750J
R	210		RS1/16S0R0J
R	212		RS1/16S102J
R	213		RS1/16S392J
R	214		RS1/16S102J
R	215		RS1/16S473J
R	216		RS1/16S103J
R	217		RS1/16S473J
R	218		RS1/16S223J
R	219		RS1/16S223J
R	220		RS1/16S223J
R	251		RS1/16S102J
R	252		RAB4C102J
R	253		RS1/16S102J
R	254		RS1/16S102J
R	255		RS1/16S0R0J
R	256		RAB4C102J
R	257		RS1/16S102J
R	258		RS1/16S102J
R	259		RS1/16S271J
R	260		RS1/16S472J
R	261		RS1/16S273J
R	262		RS1/16S473J
R	263		RS1/16S0R0J
R	264		RS1/16S0R0J
R	265		RS1/16S221J
R	301		RS1/16S822J
R	302		RS1/16S822J
R	303		RS1/16S471J
R	304		RS1/16S471J
R	305		RS1/16S471J
R	306	(EW,ES/RD,ES/RC)	RS1/16S561J
R	307	(EW,ES/RD,ES/RC)	RS1/16S102J
R	308	(EW,ES/RD,ES/RC)	RS1/16S1003D
R	309		RS1/16S750J
R	310		RS1/16S105J
R	311		RS1/16S105J
R	312		RS1/16S101J
R	313		RS1/16S101J

=====Circuit Symbol and No.===Part Name			Part No.
R	314		RS1/16S682J
R	315		RS1/16S682J
R	317		RS1/16S101J
R	318		RS1/16S101J
R	319		RS1/16S101J
R	320		RS1/16S105J
R	321		RS1/16S105J
R	322		RS1/16S105J
R	323		RS1/16S105J
R	324		RS1/16S105J
R	325		RS1/16S102J
R	326		RS1/16S102J
R	327		RS1/16S101J
R	328		RS1/16S105J
R	329		RS1/16S750J
R	330		RS1/16S750J
R	331		RS1/16S105J
R	332		RS1/16S105J
R	333		RS1/16S102J
R	334		RS1/16S102J
R	401		RS1/16S473J
R	402		RS1/16S103J
R	403		RS1/16S473J
R	406		RS1/16S473J
R	407		RS1/16S473J
R	408		RS1/16S473J
R	409		RS1/10S0R0J
R	410		RS1/10S103J
R	411		RS1/16S102J
R	412		RS1/10S103J
R	413		RS1/10S473J
R	414		RS1/16S0R0J
R	415		RS1/10S473J
R	416		RS1/16S473J
R	418		RS1/16S473J
R	419		RS1/10S103J
R	420		RS1/16S750J
R	421		RS1/16S750J
R	423		RAB4C102J
R	424		RS1/16S473J
R	425		RS1/16S122J
R	426		RS1/16S122J
R	427		RS1/16S122J
R	501		RS1/16S473J
R	503		RS1/16S222J
R	504		RS1/16S222J
R	505		RS1/16S473J
R	507		RS1/16S472J
R	508		RS1/16S472J
R	509		RS1/16S472J
R	510		RS1/16S472J
R	511		RS1/16S104J
R	512		RS1/16S104J
R	513		RS1/16S821J
R	514		RS1/16S821J
R	515		RS1/16S473J
R	516		RS1/16S473J
R	517		RS1/16S473J
R	518		RS1/16S473J
R	519		RS1/16S472J
R	520		RS1/16S472J
R	521		RS1/16S223J
R	522		RS1/16S223J
R	523		RS1/16S473J
R	524		RS1/16S821J

=====Circuit Symbol and No.===Part Name			Part No.
R	525		RS1/16S821J
R	526		RS1/16S223J
R	527		RS1/16S223J
R	528		RS1/16S472J
R	529		RS1/16S472J
R	601		RS1/16S102J
R	602		RS1/16S102J
R	603		RS1/16S473J
R	607	(UC)	RS1/16S223J
R	607	(EW)	RS1/16S473J
R	607	(ES/RD,ES/RC)	RS1/16S113J
R	608		RS1/16S104J
R	609	(UC)	RS1/16S223J
R	609	(ES/RD,ES/RC)	RS1/16S333J
R	610		RAB4C473J
R	611		RS1/16S473J
R	612		RS1/16S473J
R	613		RS1/16S104J
R	614		RS1/16S104J
R	615		RS1/16S104J
R	616		RAB4C102J
R	617		RS1/16S0R0J
R	618		RS1/16S102J
R	619		RS1/16S473J
R	620		RAB4C473J
R	622		RS1/16S102J
R	623	(UC)	RS1/16S103J
R	624		RS1/16S102J
R	626		RS1/16S102J
R	627	(UC)	RS1/16S473J
R	629		RS1/16S102J
R	630		RS1/16S224J
R	631		RS1/16S473J
R	632		RS1/16S104J
R	633		RS1/16S473J
R	634		RS1/16S473J
R	636		RS1/16S471J
R	637		RAB4C102J
R	651		RS1/16S102J
R	652		RS1/16S102J
R	653		RS1/16S102J
R	654	(EW)	RS1/16S102J
R	656		RS1/16S104J
R	657		RS1/16S104J
R	658		RS1/16S104J
R	659		RS1/16S104J
R	702		RS1/16S104J
R	703		RS1/16S104J
R	704		RAB4C473J
R	705		RS1/16S102J
R	708		RS1/16S471J
R	709		RS1/16S473J
R	710		RS1/16S473J
R	711		RS1/16S102J
R	712		RS1/16S473J
R	713	(UC)	RS1/16S333J
R	713	(EW)	RS1/16S223J
R	713	(ES/RD)	RS1/16S473J
R	713	(ES/RC)	RS1/16S113J
R	714	(UC)	RS1/16S113J
R	714	(EW)	RS1/16S223J
R	714	(ES/RC)	RS1/16S333J
R	715		RS1/16S473J
R	717		RS1/16S473J
R	719		RS1/16S102J

=====Circuit Symbol and No.		===Part Name	Part No.
R	720		RS1/16S473J
R	721		RS1/16S473J
R	722		RS1/16S473J
R	723		RS1/16S473J
R	724		RS1/16S473J
R	725		RS1/16S473J
R	801		RS1/16S473J
R	802		RS1/16S473J
R	803		RS1/16S102J
R	804		RS1/16S102J
R	805		RS1/16S102J
R	806		RS1/16S102J
R	807		RS1/16S101J
R	808		RS1/16S101J
R	809		RS1/16S223J
R	810		RS1/16S223J
R	811		RS1/16S181J
R	812		RS1/16S181J
R	851		RS1/16S621J
R	853		RS1/16S473J
R	854		RS1/16S361J
R	1301		RS1/4S511J
R	1302		RS1/4S511J
R	1303		RS1/16S685J
R	1304		RS1/16S105J
R	1305		RS1/16S103J
R	1306		RS1/16S393J

CAPACITORS

C	16		CKSRYB102K50
C	17		CEV220M16
C	18	0.1F/5.5V	CCL1023
C	19		CKSRYB472K50
C	20	100µF/16V	CCH1319
C	21	100µF/16V	CCH1319
C	22	100µF/16V	CCH1319
C	23	100µF/16V	CCH1319
C	24	100µF/10V	CCH1332
C	25		CKSRYB104K16
C	27		CKSRYB472K50
C	28		CKSRYB472K50
C	29	47µF/16V	CCH1413
C	30		CEV101M16
C	31		CEV101M16
C	32		CEV101M16
C	33		CEV101M16
C	34		CEV101M16
C	35		CEV101M16
C	36		CKSRYB472K50
C	37		CKSRYB472K50
C	38		CEV101M16
C	39		CKSQYB474K16
C	40		CEV101M16
C	41	47µF/16V	CCH1413
C	42		CKSRYB472K50
C	43		CKSRYB472K50
C	44		CKSRYB472K50
C	45		CEV101M16
C	46		CEVR33M50
C	47		CEV220M16
C	48	100µF/10V	CCH1332
C	49		CEV220M16
C	50		CKSRYB103K50
C	51		CKSYB106K6R3

=====Circuit Symbol and No.		===Part Name	Part No.
C	52	680µF/16V	CCH1415
C	53		CKSRYB103K50
C	54		CKSRYB103K50
C	55	100µF/16V	CCH1319
C	56	100µF/16V	CCH1319
C	57	100µF/16V	CCH1319
C	101		CKSRYB102K50
C	102		CKSRYB102K50
C	103		CEV101M16
C	104		CEV470M6R3
C	105		CKSRYB102K50
C	106		CEV4R7M25
C	107		CEV470M16
C	108		CKSRYB102K50
C	109		CEV101M16
C	110		CEV101M16
C	111		CEV101M16
C	112		CEV101M16
C	114		CKSRYB102K50
C	115		CKSRYB105K6R3
C	116		CSZS330M6R3
C	117		CFHSQ562J16
C	118		CKSRYB102K50
C	119		CKSRYB103K50
C	120	470µF/16V	CCH1183
C	251		CKSRYB102K50
C	252		CEV101M16
C	253		CKSRYB103K50
C	254		CKSRYB103K50
C	255		CEV101M16
C	256		CKSRYB102K50
C	257		CKSRYB102K50
C	258		CEV101M16
C	301		CKSYB106K6R3
C	302		CKSRYB102K50
C	303		CCSRCH471J50
C	304		CCSRCH471J50
C	305		CKSRYB103K50
C	306		CKSRYB103K50
C	309	(EW,ES/RD,ES/RC)	CCSRCH221J50
C	310	(EW,ES/RD,ES/RC)	CKSRYB104K16
C	311	(EW,ES/RD,ES/RC)	CKSRYB103K50
C	312	(EW,ES/RD,ES/RC)	CKSRYB103K50
C	313		CEV221M4
C	314		CEV221M4
C	315		CKSQYB225K10
C	316		CKSQYB225K10
C	317		CKSRYB104K16
C	318		CCSRCH220J50
C	319		CCSRCH220J50
C	320		CKSRYB105K6R3
C	321		CKSRYB105K6R3
C	322		CKSRYB104K16
C	323		CKSRYB104K16
C	324		CKSYB106K6R3
C	325		CCSRCH220J50
C	326	47µF/16V	CCH1413
C	327		CKSRYB103K50
C	328		CKSRYB104K16
C	329		CKSRYB104K16
C	330		CCSRCH220J50
C	331		CCSRCH220J50
C	332		CKSRYB104K16
C	333		CKSRYB105K6R3
C	334		CKSRYB105K6R3

=====Circuit Symbol and No.		===Part Name	Part No.
C	335		CCSRCH470J50
C	336		CCSRCH470J50
C	337		CKSRYB105K6R3
C	338		CKSRYB105K6R3
C	339		CCSRCH220J50
C	340		CEV220M6R3
C	341		CEV101M6R3
C	342		CEV101M6R3
C	343		CKSRYB104K16
C	344	47μF/16V	CCH1413
C	345		CEV101M6R3
C	346		CKSRYB103K50
C	347		CEV101M6R3
C	348		CEV101M6R3
C	349		CEV220M6R3
C	351		CKSRYB105K6R3
C	352		CKSRYB105K6R3
C	353		CKSRYB105K6R3
C	401		CKSYB105K25
C	402		CKSRYB104K16
C	404	3300μF/16V	CCH1018
C	405		CKSRYB103K50
C	407		CEV100M16
C	408		CKSQYB225K10
C	501		CEV100M16
C	502		CEV100M16
C	503		CCSRCH220J50
C	504		CCSRCH220J50
C	505		CEV4R7M25
C	506		CEV4R7M25
C	507		CKSRYB104K16
C	508		CEV4R7M25
C	509		CKSRYB221K50
C	510		CKSRYB221K50
C	511		CKSRYB103K50
C	512		CEV101M16
C	513		CEV220M6R3
C	514		CEV101M16
C	515		CEV4R7M25
C	516		CEV4R7M25
C	517		CCSRCH220J50
C	518		CCSRCH220J50
C	519		CCSRCH221J50
C	520		CCSRCH221J50
C	601		CKSRYB103K50
C	602		CKSRYB104K16
C	603		CKSQYB104K50
C	604		CEV4R7M25
C	605		CCSRCH101J50
C	606		CKSRYB105K6R3
C	607		CKSRYB103K50
C	608		CKSYB106K6R3
C	609		CKSRYB102K50
C	610		CKSRYB102K50
C	611		CKSRYB102K50
C	612		CKSRYB103K50
C	616		CKSRYB222K50
C	701		CKSRYB103K50
C	702		CKSRYB103K50
C	703		CCSRCH101J50
C	704		CKSYB106K6R3
C	705		CKSRYB105K6R3
C	706		CCSRCH180J50
C	707		CCSRCH180J50
C	708		CKSRYB103K50
C	709		CCSRCH101J50
C	710		CKSRYB103K50
C	801		CEVNP100M10
C	802		CEVNP100M10
C	803		CKSRYB104K16
C	804		CEV100M16
C	805		CEV100M16
C	806		CKSQYB105K16
C	807		CKSQYB105K16
C	808		CKSQYB105K16
C	809		CKSQYB105K16
C	810		CKSRYB104K16
C	813		CKSRYB104K16
C	851		CCSRCH150J50
C	853		CKSRYB104K16
C	854		CEV100M16
C	1301		CKSRYB104K16
C	1302		CKSRYB104K16
C	1303		CKSRYB104K25
C	1304		CKSRYB104K16
C	1305		CKSRYB473K50

D Unit Number : CWM7752
Unit Name : Relay Unit

MISCELLANEOUS

IC	1101	IC	BA7623F
IC	1102	IC	NJM2267V
IC	1103	IC	TC7SH32FU
IC	1104	IC	TC7S08FU
IC	1105	IC	BA7603F
IC	1106	IC	PD5582A
IC	1107	IC	TC74HC123AF
IC	1108	IC	TC7S08FU
Q	1101	Transistor	DTA114EU
Q	1102	Transistor	2SC4081
D	1101	Diode	MA142WK
D	1102	Diode	MA111
D	1103	Diode	MA111
D	1104	Diode	MA111
D	1105	Diode	MA142WK
D	1106	Diode	MA111
D	1107	Diode	UDZ4R3(B)
L	1101	Inductor-Array	CTF1421
L	1105	Inductor-Array	CTF1421
L	1108	Inductor	CTF1379
L	1109	Inductor	CTF1379
L	1110	Inductor	CTF1379
L	1111	Inductor	CTF1379
L	1112	Inductor	CTF1379
L	1118	Inductor	LCTB2R2K2125
L	1119	Inductor	LCTB2R2K2125
L	1120	Inductor	LCTB2R2K1608
L	1121	Inductor	LCTB2R2K1608
L	1122	Inductor	LCTB2R2K1608
L	1123	Inductor	LCTB2R2K2125
L	1124	Inductor	LCTA101J2520
L	1125	Inductor-Array	CTF1421
EF	1101	EMI Filter	CCG1067
EF	1102	EMI Filter	CCG1067

RESISTORS

R	1102	RS1/16S0R0J
R	1103	RS1/16S0R0J
R	1104	RS1/16S0R0J
R	1105	RS1/16S0R0J
R	1106	RS1/16S0R0J

=====Circuit Symbol and No.===Part Name Part No.

R	1107		RS1/16S750J
R	1110		RS1/16S105J
R	1111		RS1/16S105J
R	1112		RS1/16S471J
R	1113		RS1/16S101J
R	1114		RS1/16S332J
R	1115		RS1/16S152J
R	1116		RS1/16S152J
R	1117		RS1/16S152J
R	1118		RS1/16S681J
R	1119		RS1/16S681J
R	1120		RS1/16S392J
R	1121		RS1/16S392J
R	1122		RS1/16S392J
R	1123		RS1/16S473J
R	1124		RS1/16S105J
R	1125		RS1/16S102J
R	1126		RS1/16S512J
R	1127		RS1/16S152J
R	1128		RS1/16S0R0J
R	1129		RS1/16S0R0J
R	1130		RS1/16S222J
R	1134		RS1/16S151J
R	1135		RS1/16S0R0J

CAPACITORS

C	1101		CKSRYB104K16
C	1102		CEV470M16
C	1103		CEV470M16
C	1104		CSZSR101M6R3
C	1107		CSZSR101M6R3
C	1108		CKSRYB103K50
C	1109		CKSYB106K6R3
C	1112		CSZSR101M6R3
C	1114		CEV101M16
C	1115		CEV220M6R3
C	1116		CKSQYB225K10
C	1117		CKSRYB103K50
C	1118		CKSYB106K6R3
C	1121		CKSRYB105K6R3
C	1123		CKSRYB105K6R3
C	1124		CKSRYB104K16
C	1125		CKSRYB104K16
C	1126		CKSRYB104K16
C	1127		CKSYB106K6R3
C	1128		CKSRYB103K50
C	1129		CKSRYB105K6R3
C	1130		CKSRYB105K6R3
C	1131		CKSRYB105K6R3
C	1132		CKSRYB103K50
C	1133		CEV101M16
C	1134		CKSRYB103K50
C	1135		CCSRCH471J50
C	1136		CCSRCH471J50
C	1137		CKSRYB105K6R3
C	1138		CKSRYB105K6R3
C	1139		CCSRCH101J50
C	1140		CKSRYB105K6R3
C	1141		CKSRYB104K16

=====Circuit Symbol and No.===Part Name Part No.

Keyboard Unit

Consists of
Inverter PCB
Grille PCB

E F

Unit Number : CWM7744(UC,ES/RD,ES/RC)
CWM7745(EW)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC	1901	IC	TSOP1840SB1
IC	2941	IC	OZ960IS
IC	2942	IC	TA78L05F
Q	1901	Transistor	UMD2N
Q	1902	Transistor(EW)	2SC2412K
Q	1903	Transistor(EW)	2SC2412K
Q	1904	Transistor(EW)	2SC2412K
Q	2941	Transistor	2SC4081
Q	2942	Transistor	DTA144EE
Q	2943	FET	SI6544DQ
Q	2944	FET	SI6544DQ
D	1901	Diode	MA111
D	1902	Diode	MA111
D	1903	Diode	MA111
D	1904	LED	CL170SRCD
D	1905	LED	CL170DCD
D	1906	LED	CL170PGCD
D	1907	LED	CL155DPGD
D	1908	LED	CL155DPGD
D	1909	LED	CL170PGCD
D	2940	Diode	UDZ6R8(B)
D	2941	Diode	HZU6R2(B3)
D	2942	Diode	HZU6R2(B3)
D	2943	Diode	MA143
D	2944	Diode	MA143
D	2950	Diode	UDZ5R6(B)
D	2951	Diode	1SS355
T	2941	Transformer	CTT1102
S	1901	Spring Switch(Detach sense)	CSN1046
S	1902	Push Switch(Reset)	CSG1111
S	1903	Push Switch(UC,ES/RC,ES/RD)	CSG1112
S	1903	Push Switch(EW)	CSG1113
S	1904	Push Switch(UC,ES/RC,ES/RD)	CSG1112
S	1904	Push Switch(EW)	CSG1113
S	1905	Push Switch(UC,ES/RC,ES/RD)	CSG1112
S	1905	Push Switch(EW)	CSG1113
S	1906	Push Switch(UC,ES/RC,ES/RD)	CSG1112
S	1906	Push Switch(EW)	CSG1113
S	1907	Push Switch(UC,ES/RC,ES/RD)	CSG1112
S	1907	Push Switch(EW)	CSG1113
S	1908	Push Switch(UC,ES/RC,ES/RD)	CSG1112
S	1908	Push Switch(EW)	CSG1113
S	1909	Push Switch(UC,ES/RC,ES/RD)	CSG1112
S	1909	Push Switch(EW)	CSG1113
S	1910	Push Switch(UC,ES/RC,ES/RD)	CSG1112
S	1910	Push Switch(EW)	CSG1113
S	2942	Push Switch	CSG1112
S	2943	Push Switch	CSG1112
S	2944	Push Switch	CSG1112

RESISTORS

R	1901		RS1/16S100J
R	1902		RS1/16S472J
R	1903		RS1/16S271J
R	1904		RS1/16S181J
R	1905		RS1/16S181J

=====Circuit Symbol and No.===Part Name			Part No.
R	1906	(UC,ES/RD,ES/RC)	RS1/16S131J
R	1906	(EW)	RS1/16S151J
R	1907	(EW)	RS1/16S301J
R	1908	(EW)	RS1/16S131J
R	1909		RS1/16S181J
R	1910	(UC,ES/RD,ES/RC)	RS1/16S131J
R	1910	(EW)	RS1/16S151J
R	1911	(EW)	RS1/16S131J
R	1912	(EW)	RS1/16S181J
R	1914		RS1/16S123J
R	1915		RS1/16S473J
R	1916		RS1/16S123J
R	1917		RS1/16S183J
R	1918		RS1/16S393J
R	1919		RS1/16S124J
R	1920	(EW)	RS1/16S103J
R	1921	(EW)	RS1/16S153J
R	1922	(EW)	RS1/16S472J
R	1923	(EW)	RS1/16S153J
R	1924	(UC,ES/RD,ES/RC)	RS1/16S0R0J
R	1925	(EW)	RS1/16S472J
R	1926	(EW)	RS1/16S153J
R	1930		RS1/16S271J
R	1931		RS1/16S271J
R	1932		RS1/16S181J
R	1933		RS1/16S181J
R	1934		RS1/16S181J
R	1935		RS1/16S181J
R	1936		RS1/16S181J
R	1937		RS1/16S181J
R	1938	(UC,ES/RD,ES/RC)	RS1/16S131J
R	1938	(EW)	RS1/16S151J
R	1939	(UC,ES/RD,ES/RC)	RS1/16S131J
R	1939	(EW)	RS1/16S151J
R	1940	(UC,ES/RD,ES/RC)	RS1/16S131J
R	1940	(EW)	RS1/16S151J
R	1941	(EW)	RS1/16S131J
R	1942	(EW)	RS1/16S131J
R	1943	(EW)	RS1/16S131J
R	1944		RS1/16S181J
R	1945		RS1/16S181J
R	1946		RS1/16S181J
R	1947	(UC,ES/RD,ES/RC)	RS1/16S131J
R	1947	(EW)	RS1/16S151J
R	1948	(UC,ES/RD,ES/RC)	RS1/16S131J
R	1948	(EW)	RS1/16S151J
R	1949	(UC,ES/RD,ES/RC)	RS1/16S131J
R	1949	(EW)	RS1/16S151J
R	1950	(EW)	RS1/16S131J
R	1951	(EW)	RS1/16S131J
R	1952	(EW)	RS1/16S131J
R	1953	(EW)	RS1/16S181J
R	1954	(EW)	RS1/16S181J
R	1955	(EW)	RS1/16S181J
R	1956	(EW)	RS1/16S301J
R	1957	(EW)	RS1/16S301J
R	1958	(EW)	RS1/16S301J
R	1959		RS1/16S271J
R	1960		RS1/16S0R0J
R	1962	(UC,ES/RD,ES/RC)	RS1/16S0R0J
R	1963		RS1/16S271J
R	1964		RS1/16S271J
R	1965		RS1/16S271J
R	1966		RS1/16S271J
R	2940		RS1/16S472J

=====Circuit Symbol and No.===Part Name			Part No.
R	2941		RS1/16S104J
R	2942		RS1/16S334J
R	2943		RS1/16S0R0J
R	2944		RS1/16S473J
R	2945		RS1/16S102J
R	2946		RS1/16S513J
R	2947		RS1/16S105J
R	2948		RN1/16SE6802D
R	2949		RS1/16S103J
R	2951		RS1/16S103J
R	2953		RS1/16S471J
R	2955		RS1/16S393J
R	2958		RS1/10S122J
R	2966		RS1/16S153J

CAPACITORS

C	1901		CKSRYB104K16
C	1902		CKSRYB105K6R3
C	2941		CKSRYB104K16
C	2942		CKSRYB105K6R3
C	2943		CKSRYB103K50
C	2944		CKSRYB105K6R3
C	2945		CKSRYB474K10
C	2946		CKSRYB105K6R3
C	2947		CKSRYB104K16
C	2948		CKSRYB222K50
C	2949		CKSRYB152K50
C	2952		CKSRYB103K50
C	2953		CKSRYB473K50
C	2954		CCSRCH221J50
C	2955		CKSRYB473K50
C	2956	10µF	CCG1150
C	2957	10µF	CCG1150
C	2958		CKSYB225K16
C	2959	22pF	CCG1140
C	2961		CKSRYB273K25

Encoder Unit

Consists of
Encoder PCB
SW PCB

G **H** Unit Number: CWM7620
Unit Name : Encoder Unit

MISCELLANEOUS

IC	2801	IC	TA7806S
IC	2802	IC	TA78L05F
IC	2803	IC	BA6951FS
IC	2804	IC	TC7S14FU
IC	2805	Photo-interrupter	GP1S25
IC	2806	Photo-interrupter	GP1S25
IC	2807	IC	TC7W14FU
Q	2801	Transistor	2SA1615-Z
Q	2802	Transistor	DTC114EK
Q	2803	Transistor	DTC144EK
Q	2804	Transistor	DTC144EK
D	2804	Diode	UDZS3R9(B)
L	2801	Inductor	LCYA150K3225
L	2802	Inductor	LCTB150K2125
L	2803	Inductor	LCYA150K3225
S	2801	Spring Switch(DEG0)	CSN1053

=====Circuit Symbol and No.===Part Name Part No.

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RESISTORS

R	2800		RS1/10S0R0J
R	2801		RS1/16S153J
R	2802		RS1/4S751J
R	2803		RS1/4S751J
R	2804		RS1/16S1201F
R	2805		RS1/16S3000F
R	2807		RS1/16S563J
R	2808		RS1/4S2R0J
R	2809		RS1/16S221J
R	2811		RS1/16S273J
R	2813		RS1/16S471J
R	2814		RS1/10S391J
R	2815		RS1/16S473J
R	2816		RS1/4S2R0J
R	2817		RS1/16S0R0J
R	2818		RS1/16S103J
R	2819		RS1/16S0R0J
R	2820		RS1/16S0R0J
R	2821		RS1/16S473J
R	2822		RS1/16S0R0J
R	2823		RS1/10S391J
R	2824		RS1/16S473J
R	2825		RS1/16S0R0J
R	2829		RS1/16S103J
R	2830		RS1/16S103J
R	2831		RS1/16S1501F
R	2832		RS1/16S153J
R	2833		RS1/16S272J

CAPACITORS

C	2801		CKSQYB104K25
C	2802		CEV101M16
C	2803		CKSRYB104K16
C	2804		CKSRYB104K16
C	2805		CSZSR100M16
C	2806		CKSRYB104K16
C	2807		CEV100M16
C	2808		CEV220M6R3
C	2809		CKSRYB104K16
C	2810		CCSRCH330J50
C	2811		CKSRYB104K16
C	2812		CKSRYB104K16
C	2813		CKSRYB104K16
C	2814		CKSRYB104K16
C	2815		CKSRYB104K16
C	2816		CEV100M16
C	2818		CKSYB106K6R3
C	2819		CKSRYB104K16
C	2820		CKSRYB104K16
C	2821		CKSQYB474K16
C	2824		CKSRYB104K16
C	2825		CCSRCH102J50
C	2826		CCSRCH102J50
C	2827		CKSRYB104K16

I Unit Number : CWX2574
Unit Name : DVD Core Unit V

MISCELLANEOUS

IC	1100	IC	AN8702FH
IC	1101	IC	NJM2904M
IC	1200	IC	MN677061ZYUB
IC	1300	IC	BA5985FM
IC	1400	IC	MNZS25BDAUB
IC	1403	IC	TC74LCX244FT
IC	1405	IC	TC7SH04FU
IC	1500	IC	MSM56V16160F8TKFM
IC	1501	IC	MSM56V16160F8TKFM
IC	1502	IC	MN677532JAUB
IC	1503	IC	TC74VCX74FT
IC	1504	IC	TC74VCX04FT
IC	1506	IC	SM8703AV
IC	1509	IC	TC74VCX74FT
IC	1601	IC	AK4380VT
IC	1700	IC	PE5277A
IC	1701	IC	M5M5V216ATP-70HI
IC	1702	IC	PD6354B
IC	1704	IC	TC74VCX08FT
IC	1705	IC	TC7SH04FU
IC	1706	IC	TC7SH32FU
IC	1802	IC	BA033SFP
IC	1803	IC	BA18BC0WFP
IC	1804	IC	BA00BC0WFP
Q	1102	Transistor	2SD601A
Q	1104	Transistor	2SB1260
Q	1105	Transistor	2SB709A
Q	1107	Transistor	UN2211
Q	1108	Transistor	2SB1260
Q	1109	Chip Transistor	2SC2712
Q	1110	Chip Transistor	2SC2712
Q	1111	Chip Transistor	2SC2712
Q	1600	Transistor	2SA1037K
Q	1601	Transistor	2SA1037K
Q	1602	Transistor	FMG12
Q	1603	Transistor	IMD2A
Q	1700	Transistor	DTA123JK
D	1100	Diode	1SS355
D	1101	Diode	1SS355
D	1401	Diode	UDZ2R7(B)
D	1601	Chip Diode	MA151WA
D	1802	Diode	S2G-6600
D	1804	Diode	1SR154-400
L	1201	Inductor	CTF1409
L	1202	Inductor	CTF1409
L	1401	Inductor	CTF1409
L	1402	Inductor	CTF1409
L	1403	Inductor	CTF1395
L	1404	Inductor	CTF1473
L	1500	Inductor	CTF1395
L	1501	Inductor	CTF1394
L	1502	Inductor	CTF1409
L	1503	Inductor	CTF1399
L	1504	Inductor	CTF1399
L	1505	Inductor	CTF1399
L	1506	Inductor	CTF1409
L	1507	Inductor	CTF1473
L	1508	Inductor	CTF1473
L	1509	Inductor	CTF1473
L	1512	Inductor	CTF1470
L	1536	Inductor	CTF1470
L	1600	Inductor	CTF1473
L	1602	Inductor	CTF1399
L	1700	Inductor	CTF1395
L	1701	Inductor	CTF1409
L	1702	Inductor	CTF1473
L	1704	Inductor	CTF1473
L	1720	Inductor	CTF1473
X	1500	Resonator 27MHz	CSS1531
X	1700	Ceramic Resonator 5MHz	CSS1547

=====Circuit Symbol and No.===Part Name			Part No.
S	1301	Spring Switch(CLAMP)	CSN1051
S	1302	Spring Switch(L/E ON/OFF)	CSN1051
S	1303	Spring Switch(8cmDETECT)	CSN1051
S	1304	Spring Switch(12cmDETECT)	CSN1051
VR	1500	Semi-fixed 2.2kΩ(B)	CCP1177
F	1600	Filter	CTF1515

RESISTORS

=====Circuit Symbol and No.===Part Name			Part No.
R	1101		RS1/16SS330J
R	1102		RS1/16SS3R9J
R	1103		RS1/16SS330J
R	1104		RS1/16SS3R9J
R	1105		RS1/16SS122J
R	1106		RS1/16SS472J
R	1107		RS1/16S6201D
R	1108		RS1/16SS3R9J
R	1109		RS1/16SS3R9J
R	1110		RS1/16S1002D
R	1113		RS1/16S2402D
R	1114		RS1/16SS823J
R	1115		RS1/16SS682J
R	1116		RS1/16SS3R9J
R	1117		RS1/16SS3R9J
R	1118		RS1/16SS223J
R	1119		RS1/16SS202J
R	1120		RS1/16SS105J
R	1121		RS1/16SS105J
R	1122		RS1/16SS103J
R	1123		RS1/16SS103J
R	1124		RS1/16SS103J
R	1125		RS1/16SS103J
R	1126		RS1/16SS103J
R	1127		RS1/16SS103J
R	1128		RS1/16SS3R9J
R	1129		RS1/16SS3R9J
R	1130		RS1/16SS102J
R	1131		RS1/16SS102J
R	1132		RS1/16SS102J
R	1133		RS1/16SS102J
R	1134		RS1/16SS102J
R	1135	Resistor Array	RAB4CQ0R0J
R	1136		RS1/16SS133J
R	1137		RS1/16SS133J
R	1138		RS1/16SS0R0J
R	1139		RS1/16SS0R0J
R	1140		RS1/16SS0R0J
R	1141		RS1/16SS0R0J
R	1142		RS1/16SS183J
R	1143		RS1/16SS273J
R	1144		RS1/16SS273J
R	1145		RS1/16SS0R0J
R	1146		RS1/16SS0R0J
R	1147		RS1/16SS0R0J
R	1148		RS1/16SS0R0J
R	1149		RS1/16SS102J
R	1150		RS1/16SS102J
R	1151		RS1/16SS102J
R	1152		RS1/16SS154J
R	1153		RS1/16SS154J
R	1154		RS1/16SS154J
R	1156		RS1/16SS224J
R	1157		RS1/16SS0R0J
R	1201		RS1/16SS203J
R	1202		RS1/16SS102J
R	1203		RS1/16SS471J
R	1204		RS1/16SS221J
R	1205		RS1/16SS221J
R	1206		RS1/16SS473J
R	1207		RS1/16SS101J
R	1208		RS1/16SS101J
R	1209		RS1/16SS473J
R	1210		RS1/16SS222J
R	1212		RS1/16SS473J
R	1213		RS1/16SS101J
R	1215		RS1/16SS123J
R	1216		RS1/16SS473J
R	1219		RS1/16SS123J
R	1220		RS1/16SS105J
R	1221		RS1/16SS562J
R	1222		RS1/16SS273J
R	1223		RS1/16SS273J
R	1226		RS1/16SS153J
R	1227		RS1/16SS123J
R	1228		RS1/16SS472J
R	1229		RS1/16SS472J
R	1230		RS1/16SS472J
R	1231		RS1/16SS273J
R	1232		RS1/16S6801D
R	1233		RS1/16SS273J
R	1234		RS1/16SS183J
R	1235		RS1/16SS102J
R	1242	Resistor Array	RAB4CQ221J
R	1245		RS1/16SS562J
R	1246		RS1/16SS242J
R	1251		RS1/16SS473J
R	1255		RS1/16SS0R0J
R	1257		RS1/16S221J
R	1258		RS1/16SS221J
R	1259		RS1/16SS221J
R	1260		RS1/16SS221J
R	1261		RS1/16SS221J
R	1262		RS1/16SS273J
R	1263		RS1/16SS273J
R	1264		RS1/16SS104J
R	1301		RS1/16S3902D
R	1302		RS1/16S3902D
R	1303		RS1/16S3002D
R	1304		RS1/16S3902D
R	1305		RS1/16SS221J
R	1306		RS1/16SS0R0J
R	1307		RS1/16SS221J
R	1308		RS1/16S3002D
R	1310		RS1/16SS102J
R	1311		RS1/16S3902D
R	1312		RS1/16S0R0J
R	1314		RS1/16SS221J
R	1321		RS1/16SS221J
R	1323		RS1/16SS104J
R	1324		RS1/16SS473J
R	1325		RS1/16SS273J
R	1400	Resistor Array	RAB4CQ681J
R	1401	Resistor Array	RAB4CQ681J
R	1403		RS1/16SS222J
R	1405		RS1/16SS221J
R	1406		RS1/16SS103J
R	1409		RS1/16SS103J
R	1413		RS1/16SS681J
R	1416		RS1/16SS681J
R	1417		RS1/16SS103J
R	1418		RS1/16SS681J
R	1425		RS1/16SS104J
R	1426		RS1/16SS103J
R	1429		RS1/16S470J

=====Circuit Symbol and No.===Part Name			Part No.
---	------	--	-------------------------
R	1434		RS1/16SS681J
R	1436		RS1/16SS103J
R	1437		RS1/16SS103J
R	1438		RS1/16SS221J
R	1439	Resistor Array	RAB4CQ0R0J
R	1440	Resistor Array	RAB4CQ0R0J
R	1441		RS1/16SS0R0J
R	1442		RS1/16SS221J
R	1443		RS1/16SS221J
R	1500		RS1/16SS560J
R	1501		RS1/16SS560J
R	1502		RS1/16SS560J
R	1503		RS1/16SS560J
R	1504		RS1/16SS560J
R	1505		RS1/16SS560J
R	1506		RS1/16SS560J
R	1507		RS1/16SS560J
R	1508		RS1/16SS560J
R	1509		RS1/16SS560J
R	1510		RS1/16SS560J
R	1511		RS1/16SS560J
R	1513		RS1/16SS750J
R	1514		RS1/16SS622J
R	1515		RS1/16SS162J
R	1516		RS1/16SS182J
R	1517		RS1/16SS201J
R	1518		RS1/16SS201J
R	1519		RS1/16S101J
R	1520		RS1/16S101J
R	1521		RS1/16S101J
R	1523		RS1/16SS221J
R	1524		RS1/16S470J
R	1527		RS1/16SS103J
R	1529		RS1/16SS104J
R	1534		RS1/16SS221J
R	1535		RS1/16SS101J
R	1537		RS1/16SS391J
R	1538		RS1/16SS391J
R	1539	Resistor Array	RAB4CQ391J
R	1540	Resistor Array	RAB4CQ391J
R	1541	Resistor Array	RAB4CQ391J
R	1542	Resistor Array	RAB4CQ391J
R	1543	Resistor Array	RAB4CQ391J
R	1544	Resistor Array	RAB4CQ391J
R	1545	Resistor Array	RAB4CQ391J
R	1546		RS1/16SS103J
R	1548		RS1/16SS103J
R	1549		RS1/16SS560J
R	1550		RS1/16SS560J
R	1551		RS1/16SS560J
R	1552		RS1/16SS560J
R	1553		RS1/16SS560J
R	1554		RS1/16SS560J
R	1555		RS1/16SS560J
R	1556		RS1/16SS560J
R	1557		RS1/16SS560J
R	1558		RS1/16SS560J
R	1559		RS1/16SS560J
R	1560		RS1/16SS560J
R	1561		RS1/16SS560J
R	1562		RS1/16SS560J
R	1563		RS1/16SS560J
R	1564		RS1/16SS560J
R	1565		RS1/16SS560J
R	1566		RS1/16S101J

=====Circuit Symbol and No.===Part Name			Part No.
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R	1567		RS1/16SS560J
R	1568		RS1/16SS560J
R	1569		RS1/16SS560J
R	1570		RS1/16SS560J
R	1571		RS1/16SS560J
R	1572		RS1/16SS560J
R	1573		RS1/16SS560J
R	1574		RS1/16SS560J
R	1575		RS1/16SS560J
R	1577		RS1/16S0R0J
R	1579		RS1/16S0R0J
R	1600		RS1/16SS271J
R	1601		RS1/16SS152J
R	1602		RS1/16SS101J
R	1604		RS1/16S3300D
R	1605		RS1/16SS122J
R	1607		RS1/16SS0R0J
R	1623		RS1/16SS102J
R	1624		RS1/16SS102J
R	1625		RS1/16SS223J
R	1626		RS1/16SS223J
R	1628		RS1/16S68R0D
R	1634		RS1/16SS472J
R	1635		RS1/16SS472J
R	1636		RS1/16SS472J
R	1637		RS1/16SS472J
R	1701		RN1/16SE1502D
R	1702		RS1/16SS221J
R	1703		RS1/16SS221J
R	1704		RS1/16SS104J
R	1705		RS1/16SS103J
R	1706		RS1/16SS103J
R	1707		RS1/16SS221J
R	1708		RS1/16SS0R0J
R	1709		RS1/16SS221J
R	1710		RS1/16SS473J
R	1711		RS1/16SS330J
R	1712		RS1/16SS0R0J
R	1713		RS1/16SS104J
R	1714		RS1/16SS104J
R	1715		RS1/16SS472J
R	1716		RS1/16SS104J
R	1717		RS1/16SS473J
R	1718		RS1/16SS104J
R	1719		RS1/16SS104J
R	1720		RS1/16SS473J
R	1721		RS1/16SS104J
R	1722		RS1/16SS104J
R	1723		RS1/16SS473J
R	1724		RS1/16SS221J
R	1725		RS1/16S0R0J
R	1726		RS1/16SS104J
R	1727		RS1/16SS103J
R	1728		RS1/16SS104J
R	1729		RS1/16SS104J
R	1730		RS1/16SS473J
R	1733		RS1/16SS104J
R	1734		RS1/16SS104J
R	1735		RS1/16SS222J
R	1736		RS1/16SS221J
R	1737		RS1/16SS221J
R	1738		RS1/16SS104J
R	1739		RS1/16SS103J
R	1740		RS1/16SS103J
R	1741		RS1/16SS221J

=====Circuit Symbol and No.		===Part Name	Part No.
R	1742		RS1/16SS104J
R	1743		RS1/16SS221J
R	1744		RS1/16SS221J
R	1745		RS1/16SS221J
R	1746		RS1/16SS221J
R	1747		RS1/16SS222J
R	1748		RS1/16SS473J
R	1749		RS1/16SS104J
R	1750		RS1/16SS472J
R	1751		RS1/16SS103J
R	1752		RS1/16SS104J
R	1753		RS1/16SS104J
R	1754		RS1/16SS104J
R	1755		RS1/16SS104J
R	1756		RS1/16SS473J
R	1757		RS1/16SS472J
R	1758		RS1/16SS104J
R	1762		RS1/16SS104J
R	1763		RS1/16SS104J
R	1764		RS1/16SS104J
R	1766		RS1/16SS104J
R	1771		RS1/16SS104J
R	1772		RS1/16SS104J
R	1773		RS1/16SS104J
R	1774		RS1/16SS473J
R	1775		RS1/16SS221J
R	1776		RS1/16SS104J
R	1777		RS1/16SS104J
R	1778		RS1/16SS0R0J
R	1801		RS1/16S3902D
R	1802		RS1/16S3302D
R	1808		RS1/16SS102J
R	1809		RS1/16SS102J
R	1812		RS1/16S0R0J
R	1813		RS1/16S0R0J
R	1814		RS1/16S0R0J
R	1815		RS1/16S0R0J

CAPACITORS

C	1100		CKSRYB105K10
C	1101		CKSRYB473K25
C	1102		CKSSYB103K16
C	1103		CSZSR101M6R3
C	1104		CKSSYB104K10
C	1105		CKSSYB104K10
C	1106		CKSRYB473K25
C	1107		CKSSYB103K16
C	1108		CSZSR101M6R3
C	1109		CKSSYB104K10
C	1110		CKSRYB154K10
C	1111		CCSSCH221J25
C	1114		CCSSCH330J50
C	1115		CKSSYB104K10
C	1116		CCSSCH221J25
C	1117		CKSRYB105K10
C	1118		CKSSYB104K10
C	1119		CKSSYB104K10
C	1120		CKSSYB104K10
C	1121		CKSSYB104K10
C	1122		CSZSC470M16
C	1123		CKSRYB273K25
C	1124		CKSSYB104K10
C	1125		CKSSYB104K10
C	1126		CKSSYB473K10

=====Circuit Symbol and No.		===Part Name	Part No.
C	1127		CCSRCH561J50
C	1128		CKSSYB104K10
C	1129		CKSSYB104K10
C	1130		CCSRCH102J50
C	1131		CCSSCH120J50
C	1133		CCSRCH561J50
C	1134		CKSSYB104K10
C	1136		CCSSCH101J50
C	1137		CCSSCH101J50
C	1138		CCSSCH101J50
C	1139		CKSSYB104K10
C	1140		CKSSYB103K16
C	1141		CKSSYB104K10
C	1142		CKSSYB104K10
C	1143		CKSSYB473K10
C	1144		CKSSYB473K10
C	1145		CKSSYB103K16
C	1146		CKSSYB473K10
C	1148		CKSSYB103K16
C	1201		CKSRYB105K10
C	1202		CCSSCH101J50
C	1203		CKSRYB474K10
C	1204		CCSRCH561J50
C	1205		CCSRCH331J50
C	1206		CKSRYB105K10
C	1207		CKSSYB104K10
C	1208		CCSRCH471J50
C	1209		CCSRCH391J50
C	1210		CKSRYB105K10
C	1211		CCSSCH101J50
C	1212		CKSSYB104K10
C	1213		CKSRYB474K10
C	1214		CCSRCH102J50
C	1215		CCSRCH102J50
C	1216		CKSSYB562K25
C	1217		CCSRCH102J50
C	1218		CKSSYB104K10
C	1219		CKSSYB104K10
C	1220		CKSRYB474K10
C	1221		CCSSCH470J50
C	1222		CKSRYB183K25
C	1223		CCSRCH102J50
C	1224		CKSSYB104K10
C	1225		CKSSYB104K10
C	1227		CKSSYB103K16
C	1228		CKSSYB104K10
C	1229		CCSRCH102J50
C	1230		CKSSYB103K16
C	1231		CKSSYB104K10
C	1232		CKSRYB154K10
C	1233		CKSSYB104K10
C	1234		CKSSYB104K10
C	1235		CKSSYB104K10
C	1236		CKSSYB471K50
C	1241		CKSSYB103K16
C	1242		CKSSYB103K16
C	1243		CKSSYB104K10
C	1300		CKSSYB103K16
C	1301		CKSSYB103K16
C	1304		CKSRYB104K16
C	1305		CEV101M16
C	1308		CKSSYB104K10
C	1400		CKSSYB104K10
C	1401		CKSSYB104K10
C	1402		CKSSYB104K10

=====Circuit Symbol and No.===Part Name			Part No.
C	1403		CKSSYB104K10
C	1404		CKSSYB104K10
C	1405		CKSSYB104K10
C	1406		CKSSYB104K10
C	1407		CKSSYB104K10
C	1408		CKSSYB104K10
C	1409		CKSSYB104K10
C	1410		CKSSYB104K10
C	1411		CKSSYB104K10
C	1412		CKSSYB104K10
C	1413		CKSSYB104K10
C	1414		CKSRYB105K10
C	1415		CKSSYB104K10
C	1416		CKSSYB104K10
C	1418		CKSSYB471K50
C	1421		CKSSYB104K10
C	1423		CKSSYB104K10
C	1500		CKSSYB104K10
C	1501		CKSSYB104K10
C	1502		CKSSYB104K10
C	1503		CKSSYB104K10
C	1504		CKSSYB104K10
C	1505		CKSSYB104K10
C	1506		CSZSC101M10
C	1507		CKSSYB104K10
C	1508		CKSSYB104K10
C	1509		CKSSYB104K10
C	1510		CKSSYB104K10
C	1511		CKSSYB104K10
C	1512		CKSSYB104K10
C	1513		CKSSYB104K10
C	1514		CKSSYB104K10
C	1515		CKSSYB104K10
C	1516		CKSSYB104K10
C	1517		CKSSYB104K10
C	1518		CKSSYB104K10
C	1519		CKSSYB104K10
C	1520		CKSSYB104K10
C	1521		CKSSYB104K10
C	1522		CKSSYB104K10
C	1523		CKSSYB104K10
C	1524		CKSSYB104K10
C	1525		CKSSYB104K10
C	1526		CKSSYB104K10
C	1527		CKSSYB104K10
C	1528		CKSSYB104K10
C	1529		CKSSYB471K50
C	1530		CKSSYB104K10
C	1532		CKSSYB104K10
C	1534		CCSSCH150J50
C	1535		CKSSYB104K10
C	1536		CKSSYB104K10
C	1537		CCSSCH150J50
C	1538		CKSSYB104K10
C	1539		CKSSYB104K10
C	1540		CKSRYB105K10
C	1541		CKSRYB105K10
C	1542		CKSSYB104K10
C	1543		CKSSYB104K10
C	1544		CKSSYB104K10
C	1545		CKSSYB104K10
C	1546		CKSSYB104K10
C	1547		CKSSYB104K10
C	1548		CKSSYB104K10
C	1549		CKSSYB104K10

=====Circuit Symbol and No.===Part Name			Part No.
C	1550		CKSSYB104K10
C	1551		CKSSYB104K10
C	1552		CKSSYB104K10
C	1553		CKSSYB104K10
C	1554		CKSSYB104K10
C	1555		CKSSYB104K10
C	1556		CKSSYB104K10
C	1570		CSZSR101M6R3
C	1571		CSZSR101M6R3
C	1572		CEV101M10
C	1573		CEV101M10
C	1574		CSZSC470M10
C	1575		CSZSC470M10
C	1576		CKSSYB104K10
C	1577		CKSSYB104K10
C	1578		CKSSYB104K10
C	1579		CKSSYB104K10
C	1600		CKSRYB104K16
C	1601		CSZSR4R7M16
C	1602		CKSSYB102K50
C	1608		CSZSR4R7M16
C	1609		CSZSR4R7M16
C	1634	10μF/10V	CCH1349
C	1635	10μF/10V	CCH1349
C	1636		CKSSYB104K10
C	1637		CKSSYB104K10
C	1700		CKSSYB104K10
C	1701		CKSSYB104K10
C	1702		CKSRYB105K10
C	1703		CKSRYB105K10
C	1704		CKSSYB104K10
C	1705		CKSRYB105K10
C	1706		CKSSYB104K10
C	1707		CKSRYB105K10
C	1708		CKSSYB104K10
C	1709		CKSSYB104K10
C	1710		CKSSYB104K10
C	1711		CKSSYB104K10
C	1712		CKSSYB103K16
C	1713		CKSSYB104K10
C	1714		CKSYB106K6R3
C	1715		CKSSYB104K10
C	1716		CKSSYB104K10
C	1717		CKSSYB104K10
C	1719		CKSSYB471K50
C	1720		CKSSYB103K16
C	1721		CKSSYB104K10
C	1722		CKSSYB103K16
C	1727		CCSRCH180J50
C	1728		CCSRCH180J50
C	1800		CKSRYB474K10
C	1801		CKSRYB474K10
C	1802		CKSRYB474K10
C	1803		CKSRYB474K10
C	1804	22μF/6.3V	CCH1300
C	1805	22μF/6.3V	CCH1300
C	1808		CSZSC101M10
C	1809		CCSRCH102J50
C	1810		CCSRCH102J50
C	1811		CSZSR101M6R3
C	1812		CSZSC101M10

K Unit Number : CWX2565
Unit Name : LCD Module

MISCELLANEOUS

=====Circuit Symbol and No.===		Part Name	Part No.
Q	1		
Q	2	IC	NJM2107F
Q	3		
Q	4	IC	TC7SH04FU
Q	5	IC	TC7SH04FU
Q	6	IC	TC7S66FU
Q	7	IC	TC7SET08FU
Q	201	IC	IR3Y29B
Q	202		
Q	203		
Q	204		
Q	205	Transistor	2SA1162
Q	206		
Q	207	IC	TC7S66FU
Q	208	IC	TC7S66FU
Q	210		
Q	211	IC	TC7S66FU
Q	212	IC	TC7S66FU
Q	271	IC	TC74HC4053AFT
Q	272	Transistor	2SA1162
Q	282	IC	TC7W14FU
Q	291	IC	TC7SET08FU
Q	292	IC	TC7S14FU
Q	293	IC	TC7S14FU
Q	501	IC	TA75072F
Q	502	Transistor	2SC3265
Q	503	Transistor	2SA1298
Q	504	Transistor	2SC3265
Q	505	Transistor	2SA1298
Q	651	IC	AN6308S
Q	652	Transistor	2SC2712
Q	801		
Q	802		
Q	803		
D	1	Diode	1SV231
D	2		
D	3		
D	4		
D	5		
D	801		
D	802		
D	803	Diode	SB05-05CP
D	851	Diode	1SS250
D	852	Diode	1SS250
D	853		
L	1		
L	201		
L	202		
L	203		
L	204		
L	205		
L	277		
L	278		
L	279		
L	601		
L	801		
L	852	Inductor	CTF1504
L	853	Inductor	CTF1504
JP	1		RS1/16S0R0J
JP	2		RS1/16S0R0J
JP	3		RS1/16S0R0J
JP	7		RS1/16S0R0J
JP	8		RS1/16S0R0J
JP	40		RS1/16S0R0J
JP	41		RS1/16S0R0J
JP	42		RS1/16S0R0J
JP	803		RS1/16S0R0J
JP	804		RS1/16S0R0J
JP	806		RS1/16S0R0J
JP	808		RS1/16S0R0J
JP	809		RS1/16S0R0J
JP	810		RS1/16S0R0J
JP	851		RS1/16S0R0J
JP	852		RS1/16S0R0J
JP	853		RS1/16S0R0J
JP	860		RS1/8S0R0J
JP	861		RS1/8S0R0J
F	801	Fuse 1A	CEK1191
B	801		
B	802		
RM	8		
X	201		
X	202		
FL	1		
T	801		
VR	1		
VR	201		
VR	202		
VR	203		
VR	204		
VR	205		
VR	206		
VR	501		
VR	502		
VR	801		

RESISTORS

R	2		RS1/16S331J
R	3		RS1/16S332J
R	4		RS1/16S101J
R	5		RS1/16S182J
R	6		RS1/16S153J
R	7		RS1/16S105J
R	8		RS1/16S683J
R	9		RS1/16S153J
R	10		RS1/16S683J
R	11		RS1/16S472J
R	12		RS1/16S472J
R	13		RS1/16S473J
R	14		RS1/16S362J
R	15		RS1/16S303J
R	17		RS1/16S472J
R	23		RS1/16S0R0J
R	27		RS1/16S0R0J
R	28		RS1/16S102J
R	30		RS1/16S0R0J
R	31		RS1/16S0R0J
R	42		RS1/16S0R0J
R	44		RS1/16S102J
R	45		RS1/16S102J
R	46		RS1/16S0R0J
R	47		RS1/16S0R0J
R	61		RS1/16S101J
R	63		RS1/16S101J
R	64		RS1/16S101J
R	201		RS1/16S563J
R	203		RS1/16S152J

=====Circuit Symbol and No.		===Part Name	Part No.
R	206		RS1/16S512J
R	209		RS1/16S105J
R	210		RS1/16S152J
R	211		RS1/16S472J
R	212		RS1/16S331J
R	213		RS1/16S512J
R	214		RS1/16S153J
R	215		RS1/16S562J
R	216		RS1/16S152J
R	217		RS1/16S331J
R	218		RS1/16S3002F
R	219		RS1/16S2002F
R	220		RS1/16S2402F
R	221		RS1/16S2702F
R	222		RS1/16S273J
R	223		RS1/16S273J
R	224		RS1/16S273J
R	225		RS1/16S273J
R	226		RS1/16S473J
R	227		RS1/16S153J
R	228		RS1/16S473J
R	229		RS1/16S153J
R	230		RS1/16S101J
R	231		RS1/16S101J
R	234		RS1/16S102J
R	235		RS1/8S680J
R	236		RS1/8S680J
R	237		RS1/8S680J
R	238		RS1/16S681J
R	239		RS1/16S561J
R	240		RS1/16S1802F
R	242		RS1/16S624J
R	243		RS1/16S274J
R	244		RS1/16S334J
R	245		RS1/16S563J
R	246		RS1/16S101J
R	247		RS1/16S151J
R	248		
R	249		
R	250		
R	251		RS1/16S474J
R	260		RS1/16S102J
R	261		RS1/16S103J
R	262		RS1/16S101J
R	272		RS1/16S152J
R	273		RS1/16S681J
R	274		RS1/16S183J
R	275		RS1/16S221J
R	276		RS1/16S221J
R	277		RS1/16S221J
R	278		RS1/16S104J
R	279		RS1/16S104J
R	280		RS1/16S104J
R	285		RS1/16S101J
R	287		RS1/16S682J
R	291		RS1/16S101J
R	292		RS1/16S621J
R	293		RS1/16S152J
R	501		RS1/16S5602F
R	502		RS1/16S2701F
R	503		RS1/16S103J
R	504		RS1/16S911J
R	505		RS1/16S1002F
R	506		RS1/16S2201D
R	507		RS1/16S101J

=====Circuit Symbol and No.		===Part Name	Part No.
R	508		RS1/16S103J
R	509		RS1/16S333J
R	510		RS1/16S333J
R	511		RS1/16S103J
R	512		RS1/16S682J
R	513		RS1/16S183J
R	514		RS1/16S101J
R	515		RS1/16S123J
R	516		RS1/16S432J
R	517		RS1/16S0R0J
R	518		RS1/16S101J
R	651		RS1/16S151J
R	652		RS1/16S151J
R	653		RS1/8S750J
R	654		RS1/8S750J
R	655		RS1/16S332J
R	656		RS1/16S751J
R	802		
R	803		RS1/16S1502F
R	804		RS1/16S203J
R	805		RS1/16S823J
R	851		RS1/16S105J
R	852		RS1/16S564J
R	853		RS1/16S562J
R	854		RS1/8S0R0J

CAPACITORS

C	1		CCSRCH470J50
C	2		CCSRCH101J50
C	3		CCSRCH102J25
C	4		CKSRYB104K16
C	5		CKSRYB104K16
C	6		CCSRCH681J50
C	7		CKSRYB104K16
C	8		CKSRYB104K16
C	9		CKSRYB104K16
C	10		CKSRYB104K16
C	18		CKSRYF224Z16
C	19		CKSRYF224Z16
C	20		CKSRYF224Z16
C	21		CKSRYF224Z16
C	22		CKSRYF224Z16
C	23		CKSRYF224Z16
C	24		CKSRYF224Z16
C	25		CKSRYF224Z16
C	26		CKSRYF224Z16
C	27		CKSRYF104Z25
C	28		CKSRYF104Z25
C	29		CKSRYF224Z16
C	30		CKSRYF224Z16
C	31		CKSRYF224Z16
C	32		CKSRYF224Z16
C	60		CKSRYB103K50
C	61		CKSRYB103K50
C	62		CKSRYB103K50
C	63		CKSRYB103K50
C	64		CKSRYB103K50
C	66		CKSRYB103K50
C	67		CKSRYB103K50
C	68		CKSRYB103K50
C	69		CKSRYB103K50
C	70		CKSRYB103K50
C	71		CKSRYB103K50
C	72		CKSRYB103K50
C	73		CKSRYB103K50
C	201		CKSRYF105Z10
C	202		CCSRCH220J50

=====Circuit Symbol and No.===Part Name			Part No.
C	203		CCSRCH680J50
C	204		CKSYB106K6R3
C	205		CCSRCH681J50
C	206		CKSRYF104Z25
C	207		CCSRCH560J50
C	208		CKSRYB103K50
C	209		CKSRYB473K16
C	210		CCSRCH820J50
C	211		CKSRYB103K50
C	212		CKSRYB103K50
C	213		CKSRYF105Z10
C	214		CKSRYF104Z25
C	215		CCSRCH6R0D50
C	216		CKSQYB474K25
C	217		CKSRYB103K50
C	218		CCSRCH5R0C50
C	219		CKSRYF104Z25
C	220		CSZS1R0M25
C	221		CSZS1R0M25
C	222		CSZSR47M20
C	223		CKSRYF105Z10
C	224		CSZS1R0M25
C	225		CKSRYB103K50
C	226		CKSRYB103K50
C	227		CKSRYB103K50
C	228		CKSRYB103K50
C	229		CKSRYB103K50
C	230		CKSRYB103K50
C	231		CCSRCH681J50
C	232		CCSRCH331J50
C	234		CSZSR68M16
C	235		CKSRYB103K50
C	236		CKSRYB154K10
C	237		CKSRYF104Z25
C	238		CSZSR68M16
C	239		CSZSR68M16
C	240		CKSRYF104Z25
C	241		CKSRYF104Z25
C	242		CKSRYF104Z25
C	243		CKSQYB474K25
C	246		CKSYB225K16
C	247		CKSRYB103K50
C	248		CCSRCH8R0D50
C	249		CCSRCH4R0C50
C	250		CKSRYF224Z16
C	251		CKSRYF224Z16
C	253		CSZSR47M20
C	254		CSZSR68M16
C	255		CSZSR68M16
C	271		CKSRYF104Z25
C	275		CCSRCH390J50
C	276		CCSRCH390J50
C	277		CCSRCH390J50
C	284		CCSRCH221J50
C	285		CKSRYF224Z16
C	291		CCSRCH100D50
C	292		CCSRCH561J50
C	293		CKSRYF224Z16
C	294		CKSRYF224Z16
C	296		CKSRYF224Z16
C	501		CKSRYB103K50
C	502		CKSYB106K6R3
C	503		CKSRYB103K50
C	504		CKSYB106K6R3
C	505		CSZSR10M35

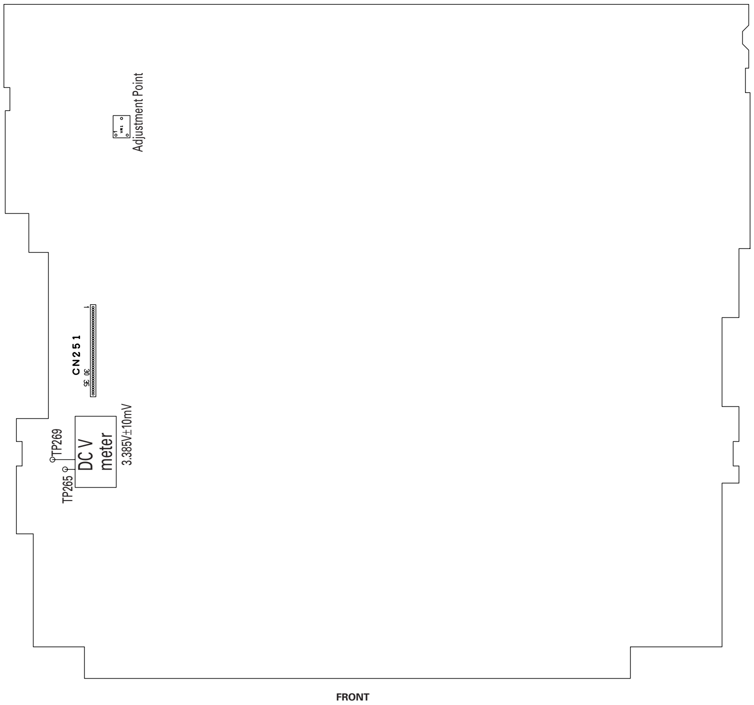
=====Circuit Symbol and No.===Part Name			Part No.
C	651		CKSYB106K6R3
C	652		CKSYB106K6R3
C	653		CKSRYF104Z25
C	654		CKSYB106K6R3
C	801		
C	803		CKSRYB473K16
C	804		CSZS2R2M16
C	805		CKSYB475K16
C	806		
C	808		CCSRCH101J50
C	809	47μF/6.3V	CCH1372
C	814		CCSRCH330J50
C	851		CSZSR4R7M25
C	853		CSZSR22M35
C	854		CSZSR22M35
C	855		CSZSR22M35
C	856		CCSRCH471J50
C	857		CSZSR22M35

Miscellaneous Parts List

		Pickup Unit(Service)(DP4)	CXX1530
M	1	Motor Unit(LOADING)	CXB5960
M	2	Motor Unit(CARRIAGE)	CXB5955
M	3	Motor(SPINDLE)	CXB6218
M	1	Motor Unit(Drive Motor)	CXB7612

6. ADJUSTMENT

6.1 VOLTAGE ADJUSTMENT FOR DVD MECHANISM



6.2 DVD MECHANISM MODULE

Cautions for servicing

This product uses 5V and 3.3V as standard voltages. The electrical potential that is the reference for signals, is not GND, but VREF (approximately 2.2V) and VHALF (approximately 1.65V).

During product adjustments, if the reference voltage is mistakenly taken as GND, and a grounding contact is made, not only would it be impossible to measure the accurate electrical potential, but also the servo motor would malfunction, resulting in the application of a strong impact on the pick up. The following precautionary measures should be strictly adhered to, in order to avoid such problems.

The reference voltage and GND should not be confused when using the minus probe of a measurement device. When an oscilloscope is being used special care should be taken to make sure that the reference voltage is not connected to the probe of ch1 (on the minus side), while the probe of ch2 (on the minus side), is connected to GND. Further, since the body frame of most measurement devices have the same electrical potential as the minus side of the probe, the body frame of the measurement device should be set to floating ground.

If the reference voltage is connected to GND by mistake, turn the regulator OFF immediately, or turn the power OFF.

- Remove the filters and wires used for measurements only after the regulator has been turned OFF.
- After the power supply is turned on, regulator ON the following adjustment and measurement are promptly done.
- Whenever the product is in the test mode, the software will not take any protective action. For this reason, special care should be taken to make sure that no mechanical or electrical shock could be applied to the product when taking measurements in the test mode.
- Whenever the EJECT key is pressed to eject the disk, no other keys, other than the EJECT key, should be pressed until the disk eject action has been completed.
- Press the EJECT key only after the disk has stopped completely.
- If the product hangs up turn the power OFF immediately.
- Laser didoes may be damaged, if the volume switch for the laser power adjustment of the pick up unit, is turned.
- Please connect with the head unit of the IP BUS comformity and do the test mode.

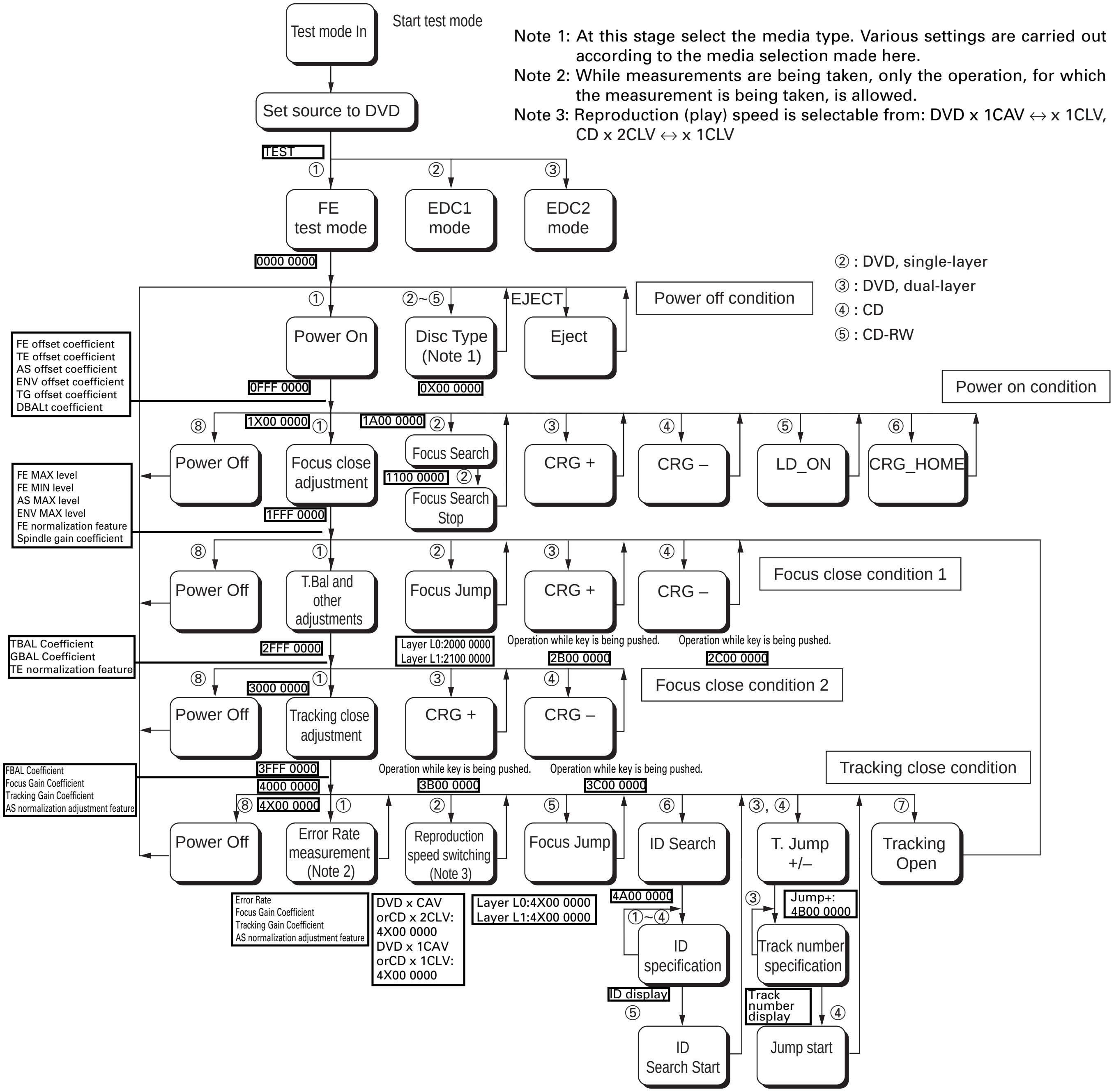
Attention)

There is a head unit that the test mode does not operate.

- Test mode starting procedure
  Reset while pressing the 4 and 6 keys together.

Please use the " remote control unit of the product accessory" after the test mode starts.

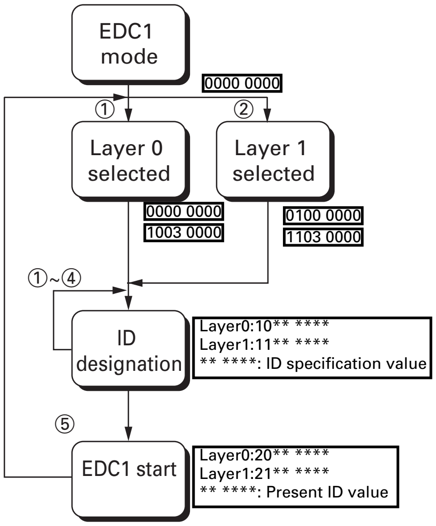
Front-End test mode flow chart

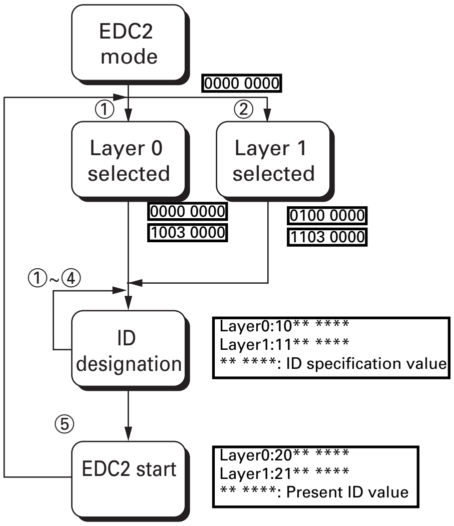


Note 1: At this stage select the media type. Various settings are carried out according to the media selection made here.
Note 2: While measurements are being taken, only the operation, for which the measurement is being taken, is allowed.
Note 3: Reproduction (play) speed is selectable from: DVD x 1CAV ↔ x 1CLV, CD x 2CLV ↔ x 1CLV

② : DVD, single-layer
③ : DVD, dual-layer
④ : CD
⑤ : CD-RW

Test mode In
Start test mode
Set source to DVD
TEST
①
②
③
FE test mode
EDC1 mode
EDC2 mode
0000 0000
Power On
Disc Type (Note 1)
Eject
EJECT
Power off condition
②~⑤
0FFF 0000
0X00 0000
Power on condition
FE offset coefficient
TE offset coefficient
AS offset coefficient
ENV offset coefficient
TG offset coefficient
DBALt coefficient
⑧
1X00 0000
1A00 0000
Power Off
Focus close adjustment
Focus Search
1100 0000
Focus Search Stop
CRG +
CRG –
LD_ON
CRG_HOME
④
⑤
⑥
1FFF 0000
FE MAX level
FE MIN level
AS MAX level
ENV MAX level
FE normalization feature
Spindle gain coefficient
T.Bal and other adjustments
Focus Jump
Focus close condition 1
Layer L0:2000 0000
Layer L1:2100 0000
Operation while key is being pushed.
2B00 0000
2C00 0000
2FFF 0000
TBAL Coefficient
GBAL Coefficient
TE normalization feature
3000 0000
Tracking close adjustment
Focus close condition 2
3B00 0000
3C00 0000
Tracking close condition
3FFF 0000
4000 0000
4X00 0000
FBAL Coefficient
Focus Gain Coefficient
Tracking Gain Coefficient
AS normalization adjustment feature
Error Rate measurement (Note 2)
Reproduction speed switching (Note 3)
ID Search
T. Jump +/–
Tracking Open
③, ④
⑦
Error Rate
Focus Gain Coefficient
Tracking Gain Coefficient
AS normalization adjustment feature
DVD x CAV orCD x 2CLV: 4X00 0000
DVD x 1CAV orCD x 1CLV: 4X00 0000
Layer L0:4X00 0000
Layer L1:4X00 0000
4A00 0000
①~④
ID specification
ID display
ID Search Start
Jump+: 4B00 0000
Track number specification
Track number display
Jump start


EDC1 mode
0000 0000
①
②
Layer 0 selected
Layer 1 selected
0000 0000
1003 0000
0100 0000
1103 0000
①~④
ID designation
Layer0:10** ****
Layer1:11** ****
** ****: ID specification value
⑤
EDC1 start
Layer0:20** ****
Layer1:21** ****
** ****: Present ID value


EDC2 mode
0000 0000
①
②
Layer 0 selected
Layer 1 selected
0000 0000
1003 0000
0100 0000
1103 0000
①~④
ID designation
Layer0:10** ****
Layer1:11** ****
** ****: ID specification value
⑤
EDC2 start
Layer0:20** ****
Layer1:21** ****
** ****: Present ID value

F-close and F-search cannot be executed, unless LD-ON is set.
[If F-close isn't executed within 9 seconds after LD-ON,
it switches to LD-OFF automatically. And even if F-search is executed
within 9 seconds after LD-ON, it also switches to LD-OFF.]

The track number designation is selected from the track numbers already prepared for selection.

Switching to cyclic operation is made at step ③, and the decision is finalized (entered) in step ④.

For CD: Tracks 1, 4, 10, 11 and 32.

For DVD: Tracks 1, 4, 10, 11, 32, 64 and 100.

Method for designating an ID address:

- A number of digits are determined through commands ① and ②. Numerical UP/DOWN operations are performed through commands ③ and ④. The decision is finalized (entered) with command ⑤.

OSD display

Error Code List

Error status from DVD micurocomputer	Contents	Display
0X50	Mecha. error	No dislay
0X40	No disc	No dislay
0X30	The temperature is abnormal	Thermal Protection in Motion
0X20	Read error	Error-02-XX
0XE2	Non-playable disc	NON-PLAYABLE DISC
0X90	Drrerent region disc	DFFERENT REGION DISC
0XFF	Undefined error	Error-FF

Error code of read error(Part of XX)

Error Code	Contents	Display
0X99	Data cannot read	Please condirm the disc
0X80	The address cannot be found	Please condirm the disc
0X90	Focus error	Please condirm the disc
0X91	Spindle lock NG	DVD is stopping because mechanism detected abnormality
0X92	Carrige home NG	DVD is stopping because mechanism detected abnormality
0X93	FOK error	Please condirm the disc
0X94	ID/Subcode cannot be read	Please condirm the disc
0X95	High spindle rotation	Please condirm the disc
0X96	Row spindle rotation	DVD is stopping because mechanism detected abnormality
0X98	TOC cannot be found	Please condirm the disc
0X9A	AV chip error	DVD is stopping because mechanism detected abnormality
0X9B	RecaveryNG(BE)	DVD is stopping because mechanism detected abnormality

● Skew adjustment

If any of the following replacements have been performed on the system, adjustments for pick up, must be conducted:

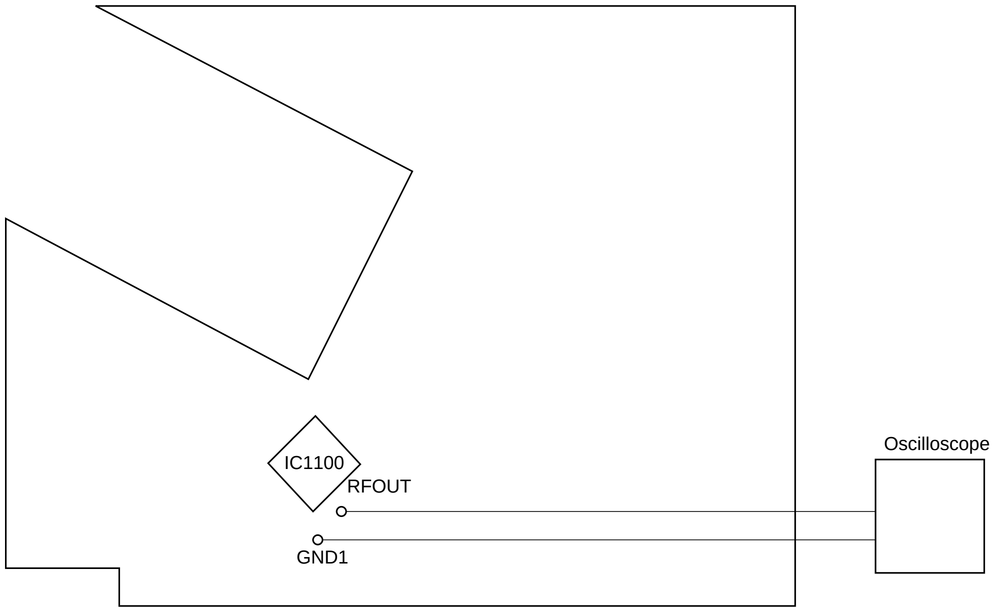
1. Pick up unit replacement
2. Spindle motor replacement
3. Carriage chassis replacement
4. Pick up unit main shaft replacement
5. Pick up unit sub-shaft replacement

Measurement device and tools : Oscilloscope
Allen key wrench
40-pin flexible extension
Adhesive material(GEM1033)
Screw rock(GYL1001)

Disk used : GGV1018
Measurement reference : GND1
Measurement point : RFOUT

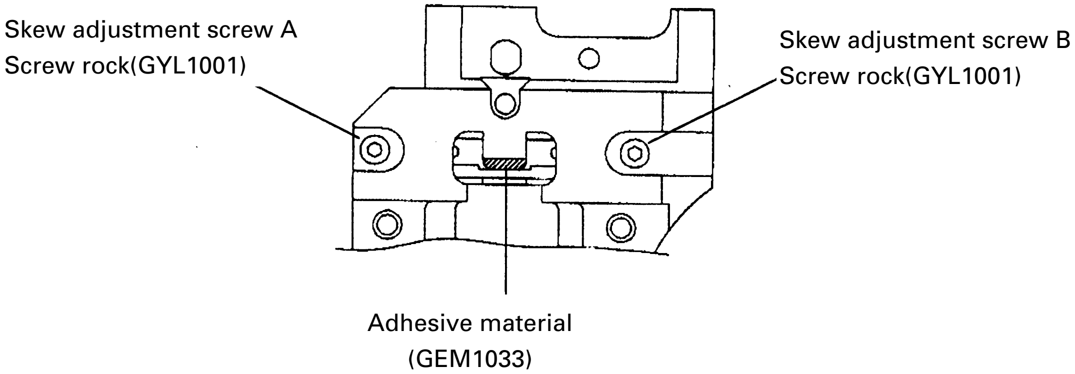
Skew adjustment connection diagram

- DVD core unit V

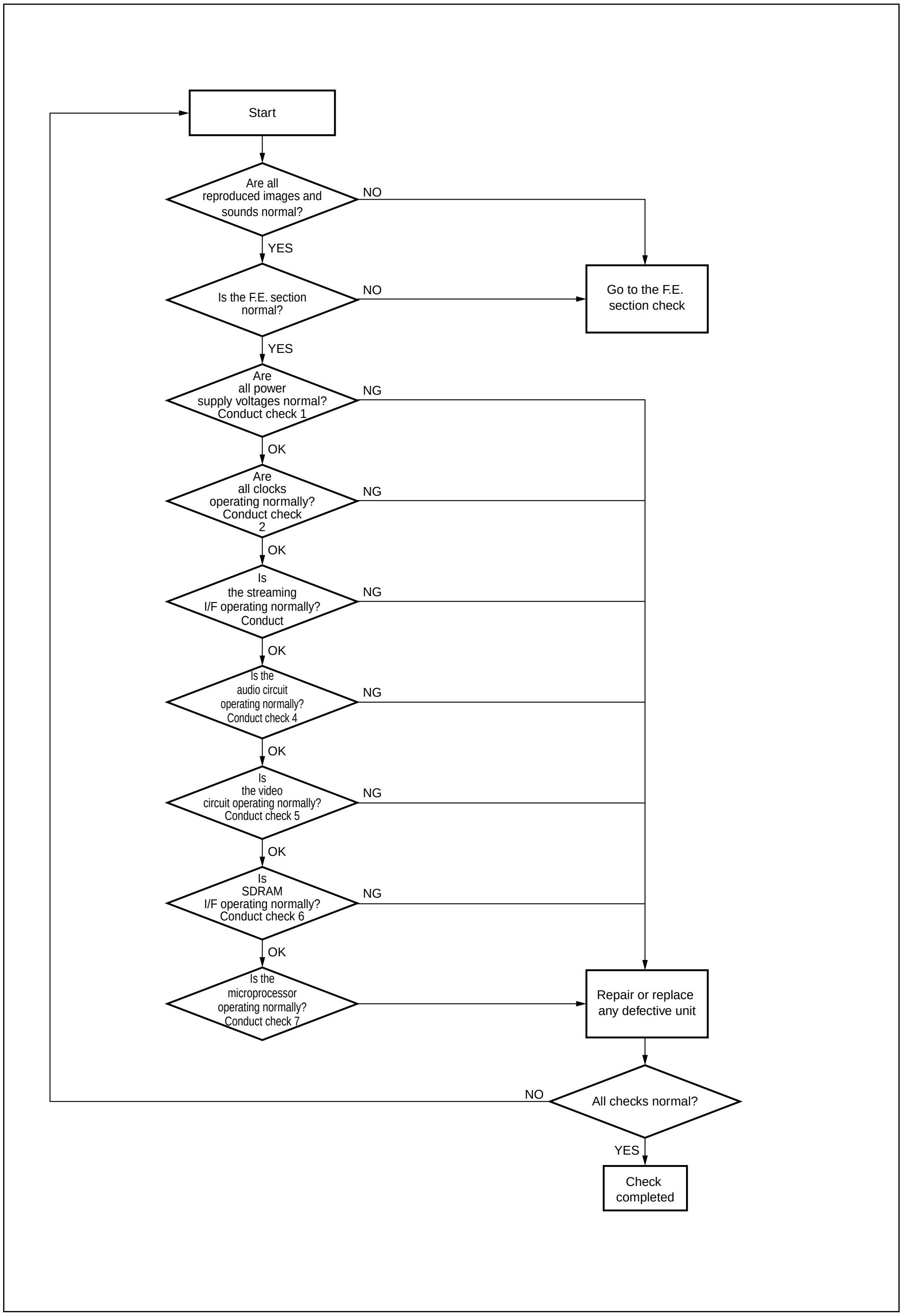


Symptoms that can occur if proper adjustments are not made: Error rate reaches 10^{-3}(10^{-4} or less under normal conditions).
The RF jitter becomes more pronounced - the RF waveform becomes deformed.
Retraction of the tracking and the servo motor, become unstable.
Cautions for performing adjustments: Do not look directly into the laser beam for any prolonged periods of time.
Procedure:
1. Replace the cable, connecting the product's main unit and the DVD mechanical module, with a 40-pin extended flexible cable (GGD1170), and turn the DVD mechanical module upside down, in order to proceed with pick-up unit adjustments.
2. Remove adhesive materials from the pick-up unit, using tweezers.
(Note) Make sure that adhesive material fragments are not scattered while removing the adhesive from the unit. Be also very careful not to exert excessive force on the actuator.
3. Connect the unit to an oscilloscope, referring to the connection diagram.
4. Turn the product power ON, and load the disk for adjustments (GGV1018).
5. Set the disk type to single-layer DVD in the front-end test mode, turn the power ON and then move the pick-up to the middle radius.
6. LD ON.
7. Close in the focus(Do not carry out 'T.Bal adjustment' and 'Tracking close'.)
8. Maximize the level by slightly turning the skew adjustment screw A, while looking at the RF waveform level on the oscilloscope.
Next, maximize the level by turning the skew adjustment screw B, slightly. Repeat this procedure three times and adjust the unit to attain a maximum level.
9. Turn the power OFF in the test mode, and eject the disk after verifying that it has stopped spinning.
10. Apply adhesive and screw lock materials, to the locations specified in the pick-up diagram (shown below).
Apply the adhesive material to secure the resin components on the pick-up chassis.
Apply the screw lock material to secure the screws on the pick-up chassis.
Do not apply any of these materials to the pick-up section or mechanical sections, which are not specified.
Keep the unit away from vibration or shock until the materials securely fix the components and screws in place.

PU diagram



● Back end section check flow chart


Start
Are all reproduced images and sounds normal?
NO
YES
Is the F.E. section normal?
NO
Go to the F.E. section check
YES
Are all power supply voltages normal? Conduct check 1
NG
OK
Are all clocks operating normally? Conduct check 2
NG
OK
Is the streaming I/F operating normally? Conduct
NG
OK
Is the audio circuit operating normally? Conduct check 4
NG
OK
Is the video circuit operating normally? Conduct check 5
NG
OK
Is SDRAM I/F operating normally? Conduct check 6
NG
OK
Is the microprocessor operating normally? Conduct check 7
Repair or replace any defective unit
NO
All checks normal?
YES
Check completed

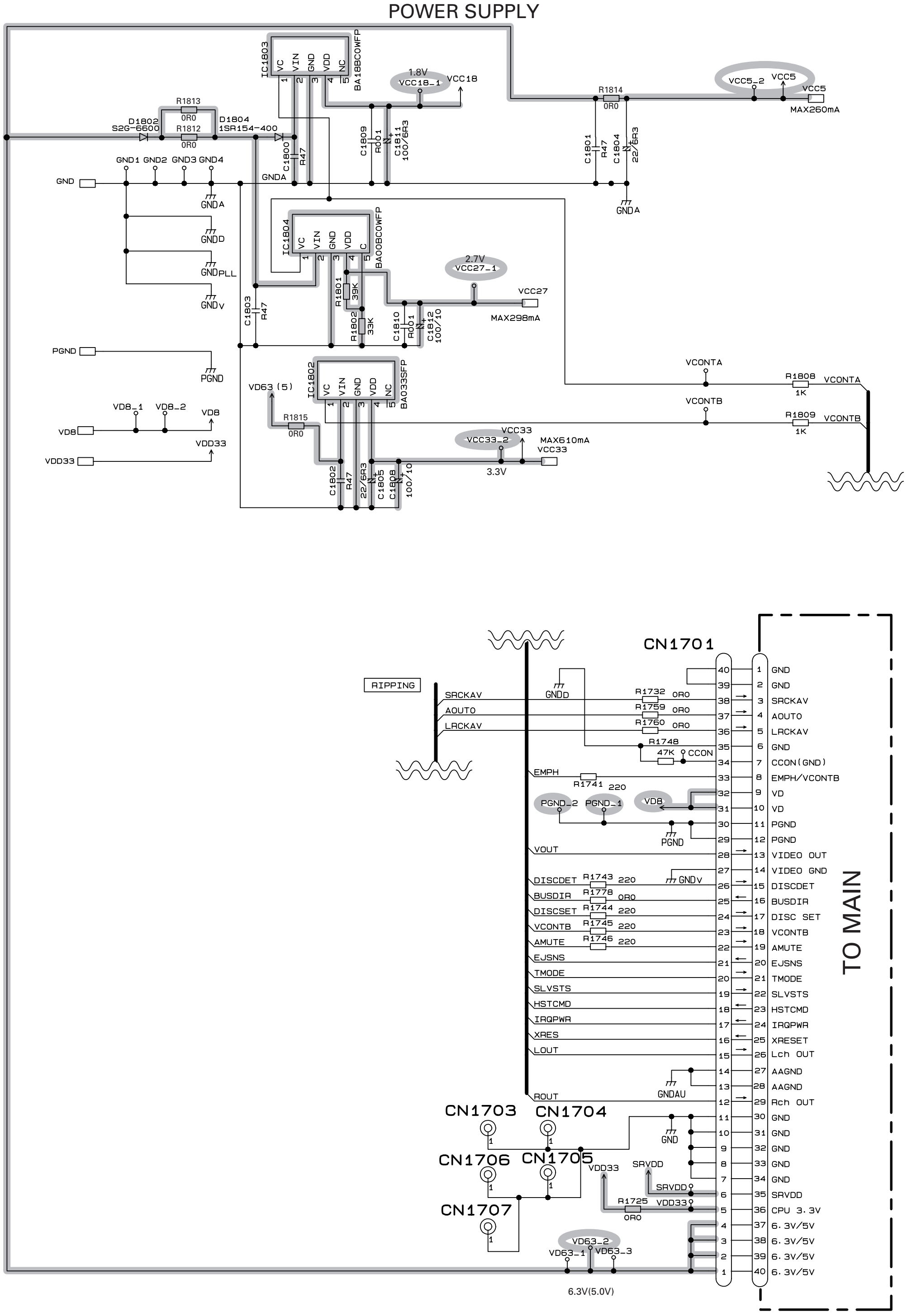
Check 1: Are all power supply voltages normal?

Reproduce DVD-REF-A1 Title 1.

Verify the voltage of the sensing pin.

If results are not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in the vicinity of IC1801 through 1804 (the section marked ① in the circuit diagram).

NO.	Verification location	Rated value	Unit
1	VD8-PGND	8±0.3	V
3	VD63-GND	5±0.25	V
4	VDD33-GND	3.3±0.3	V
5	SRVDD-GND	3.3±0.3	V
6	VCC5-GND	5±0.25	V
7	VCC33-GND	3.3±0.17	V
8	VCC27-GND	2.73±0.07	V
9	VCC18-GND	1.8±0.04	V


POWER SUPPLY
IC1803
BA18BC0WFP
VC
VIN
GND
VDD
NC
1.8V
VCC18_1
VCC18
R1813
0R0
D1802
S2G-6600
R1812
0R0
D1804
1SR154-400
C1800
R47
C1809
R001
C1811
100/6R3
R1814
0R0
VCC5_2
VCC5
VCC5
MAX260mA
C1801
R47
C1804
22/6R3
GND1
GND2
GND3
GND4
GND
GNDA
GNDA
GNDA
GNDD
GNDPLL
GNDV
IC1804
BA00BC0WFP
VC
VIN
GND
VDD
C
2.7V
VCC27_1
VCC27
MAX298mA
R1801
39K
R1802
33K
C1803
R47
C1810
R001
C1812
100/10
PGND
PGND
IC1802
BA033SFP
VC
VIN
GND
VDD
NC
VD63 (5)
R1815
0R0
VCC33
VCC33_2
MAX610mA
VCC33
3.3V
C1802
R47
22/6R3
C1805
C1808
100/10
VD8_1
VD8_2
VD8
VD8
VDD33
VDD33
VCONTA
R1808
1K
VCONTA
VCONTB
R1809
1K
VCONTB
CN1701
RIPPING
SRCKAV
AOUT0
LRCKAV
GNDD
R1732
0R0
R1759
0R0
R1760
0R0
R1748
47K
CCON
EMPH
R1741
220
PGND_2
PGND_1
VD8
PGND
VOUT
DISCDET
R1743
220
GNDV
BUSDIR
R1778
0R0
DISCSET
R1744
220
VCONTB
R1745
220
AMUTE
R1746
220
EJSNS
TMODE
SLVSTS
HSTCMD
IRQPWR
XRES
LOUT
GNDAU
ROUT
CN1703
CN1704
GND
CN1706
CN1705
VDD33
SRVDD
SRVDD
CN1707
R1725
0R0
VDD33
VD63_2
VD63_1
VD63_3
6.3V(5.0V)
40 1 GND
39 2 GND
38 3 SRCKAV
37 4 AOUT0
36 5 LRCKAV
35 6 GND
34 7 CCON(GND)
33 8 EMPH/VCONTB
32 9 VD
31 10 VD
30 11 PGND
29 12 PGND
28 13 VIDEO OUT
27 14 VIDEO GND
26 15 DISCDET
25 16 BUSDIR
24 17 DISC SET
23 18 VCONTB
22 19 AMUTE
21 20 EJSNS
20 21 TMODE
19 22 SLVSTS
18 23 HSTCMD
17 24 IRQPWR
16 25 XRESET
15 26 Lch OUT
14 27 AAGND
13 28 AAGND
12 29 Rch OUT
11 30 GND
10 31 GND
9 32 GND
8 33 GND
7 34 GND
6 35 SRVDD
5 36 CPU 3.3V
4 37 6.3V/5V
3 38 6.3V/5V
2 39 6.3V/5V
1 40 6.3V/5V
TO MAIN

Schematic diagram ①

Check 2: Are all clocks operating normally?

Reproduce DVD-REF-A1 Title 1.

Verify the circuit described in Figure ②.

This check is the same for all DVD-V compatible modules.

Checks are to be conducted with a GND reference.

If locations listed under "verification location 2", can be verified, there will be no need to perform verifications for the locations listed under "verification location 1."

If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in the vicinity of IC1506 (the section marked ② in the circuit diagram).

NO.	Verification location 1 (contact measurements)	Verification location 2	Media	Rated value 1	Rated value 2	Rated value 3
1	CLK27	IC1502 99pin	ALL	2.65V~VCC33	GND~0.65V	27MHz±50ppm
2	EXTCK	IC1502 110pin IC1601 1pin	DVD	2.65V~VCC33	GND~0.65V	36.8640MHz±100ppm
3	EXTCK	IC1502 110pin IC1601 1pin	CD	2.65V~VCC33	GND~0.65V	33.8688MHz±100ppm
4	MCK33	IC1400 100pin	ALL	2.33~VCC33	GND~0.99V	33.8688MHz±100ppm

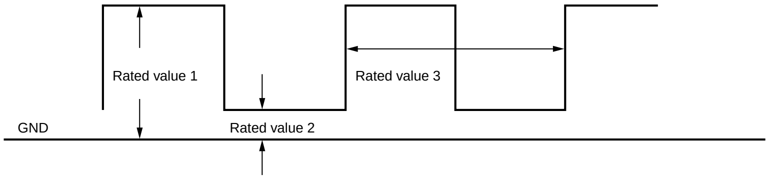
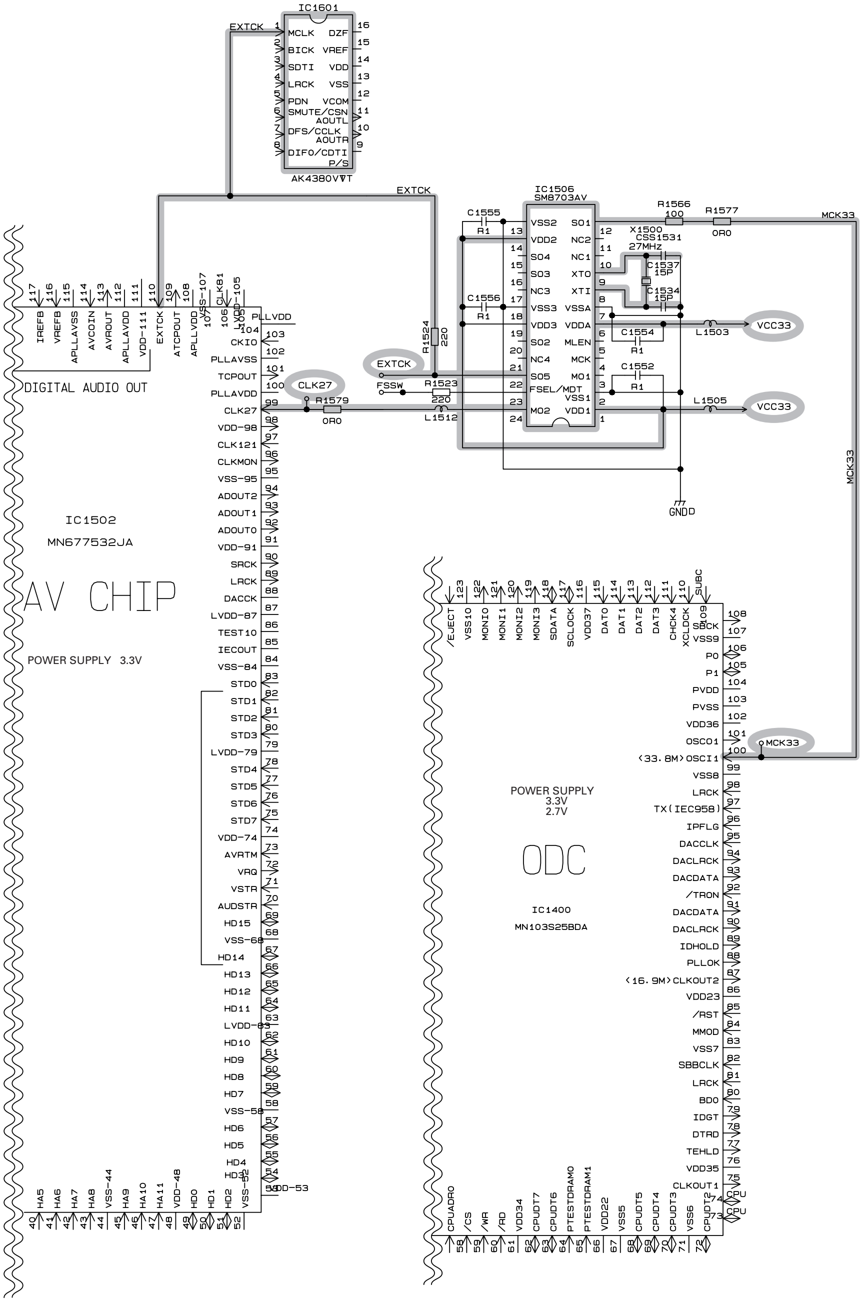


Figure 3: Clock rated values


IC1601
AK4380VT
MCLK
BICK
SDTI
LRCK
PDN
SMUTE/CSN
DFS/CCLK
DIF0/CDTI
DZF
VREF
VDD
VSS
VCOM
AOUTL
AOUTR
P/S
EXTCK
IC1506
SM8703AV
VSS2
VDD2
SO4
SO3
NC3
VSS3
VDD3
SO2
NC4
SO5
FSEL/MDT
MO2
SO1
NC2
NC1
XTO
XTI
VSSA
VDDA
MLEN
MCK
MO1
VSS1
VDD1
C1555
C1556
R1
R1566
100
R1577
0R0
MCK33
X1500
CSS1531
27MHz
C1537
15P
C1534
15P
C1554
C1552
L1503
L1505
VCC33
GNDD
R1524
220
R1523
220
L1512
FSSW
CLK27
R1579
0R0
DIGITAL AUDIO OUT
IC1502
MN677532JA
AV CHIP
POWER SUPPLY 3.3V
IREFB
VREFB
APLLAVSS
AVCOIN
AVROUT
APLLAVDD
VDD-111
ATCPOUT
APLLVDD
VSS-107
CLK81
LVDD-105
PLLVDD
CKIO
PLLAVSS
TCPOUT
PLLAVDD
CLK27
VDD-98
CLK121
CLKMON
VSS-95
ADOUT2
ADOUT1
ADOUT0
VDD-91
SRCK
LRCK
DACCK
LVDD-87
TEST10
IECOUT
VSS-84
STD0
STD1
STD2
STD3
LVDD-79
STD4
STD5
STD6
STD7
VDD-74
AVRTM
VRQ
VSTR
AUDSTR
HD15
VSS-68
HD14
HD13
HD12
HD11
LVDD-63
HD10
HD9
HD8
HD7
VSS-58
HD6
HD5
HD4
HD3
VSS-52
VDD-53
HA5
HA6
HA7
HA8
VSS-44
HA9
HA10
HA11
VDD-48
HD0
HD1
HD2
POWER SUPPLY
3.3V
2.7V
ODC
IC1400
MN103S25BDA
/EJECT
VSS10
MONI0
MONI1
MONI2
MONI3
SDATA
SCLOCK
VDD37
DAT0
DAT1
DAT2
DAT3
CHCK4
XCLDCK
SUBC
SBCK
VSS9
P0
P1
PVDD
PVSS
VDD36
OSCO1
(33.8M) OSCI1
VSS8
LRCK
TX(IEC958)
IPFLG
DACCLK
DACLRCK
DACDATA
/TRON
DACDATA
DACLRCK
IDHOLD
PLLOK
(16.9M) CLKOUT2
VDD23
/RST
MMOD
VSS7
SBBCLK
LRCK
BD0
IDGT
DTRD
TEHLD
VDD35
CLKOUT1
CPUADR0
/CS
/WR
/RD
VDD34
CPUDT7
CPUDT6
PTESTDRAM0
PTESTDRAM1
VDD22
VSS5
CPUDT5
CPUDT4
CPUDT3
VSS6
CPUDT2
CPU

Schematic diagram ②

Check 3: Is the streaming I/F operating normally?

Reproduce DVD-REF-A1 Title 1.

Verify the circuit described in Figure ③.

This check is the same for all DVD-V compatible modules.

Checks are to be conducted with a GND reference.

If the locations listed under "verification location 2" can be verified, then there is no need to conduct verifications for the locations listed under "verification location 1."

If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in areas where a problem occurs, for the overall sequence of “output " input" of the checked location.

NO.	Verification location 1 (contact measurements)	Verification location 2	Verification Media	Rated value 1	Rated value 2	Reference waveform	Others
1	STD0	IC1502 83pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD6 at R1401
2	STD1	IC1502 82pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD9 at R1401
3	STD2	IC1502 81pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD10 at R1401
4	STD3	IC1502 80pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD11 at R1401
5	STD4	IC1502 78pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD12 at R1401
6	STD5	IC1502 77pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD13 at R1401
7	STD6	IC1502 76pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD14 at R1401
8	STD7	IC1502 75pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD15 at R1401
9	AVRTM	IC1502 73pin	DVD	2V~VCC33	GND~0.8V	Waveform 2	Line name O/IOWR
10	STCLK	IC1502 71pin	DVD	2V~VCC33	GND~0.8V	Waveform 2	Line name ODA2
11	STVALID	IC1502 70pin	DVD	2V~VCC33	GND~0.8V	Waveform 2	Line name O/INTRO
12	MASTER	IC1400 24pin	DVD	2V~VCC33	GND~0.8V	Waveform 2	Line name STENABLE

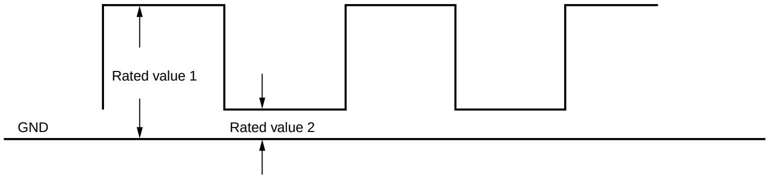
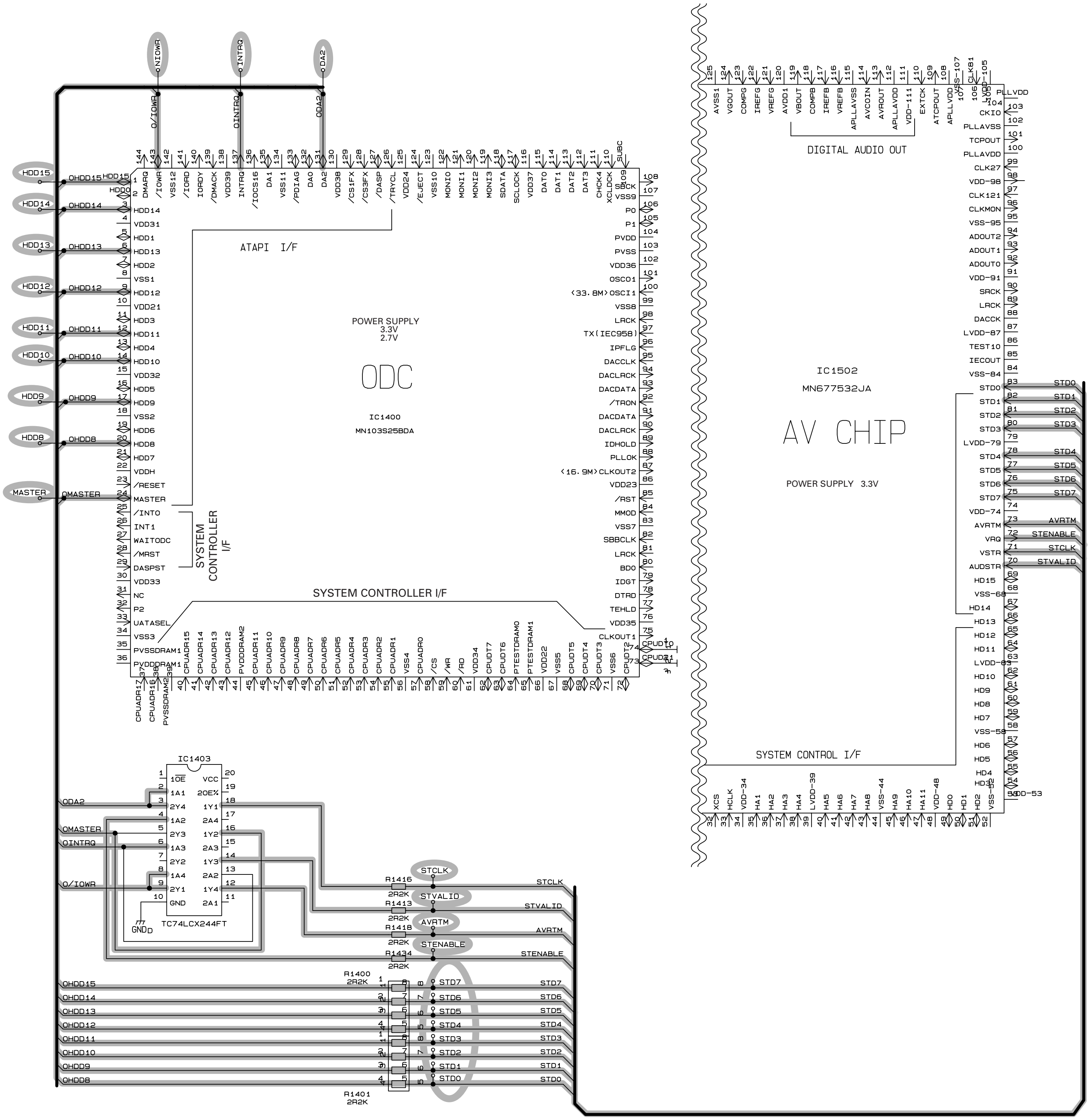


Figure 5: Streaming I/F rated value


ODC
IC1400
MN103S25BDA
POWER SUPPLY 3.3V 2.7V
ATAPI I/F
SYSTEM CONTROLLER I/F
AV CHIP
IC1502
MN677532JA
POWER SUPPLY 3.3V
DIGITAL AUDIO OUT
SYSTEM CONTROL I/F
IC1403
TC74LCX244FT
STCLK
STVALID
AVRTM
STENABLE
STD0
STD1
STD2
STD3
STD4
STD5
STD6
STD7
HDD8
HDD9
HDD10
HDD11
HDD12
HDD13
HDD14
HDD15
MASTER
NIOWR
INTRQ
DA2
R1400
R1401
R1413
R1416
R1418
R1434
2R2K

Schematic diagram ③

Check 4: Is the audio circuit operating normally?

Reproduce DVD-REF-A1 Title 2 Chapter (48V/16-bit/1 kHz/0dB). Verify the circuit described in Figure 2.
This check is the same for all DVD-V compatible modules.
Checks are to be conducted using GNDAU1 (sensing pins) as a reference.
If the locations, listed under "verification location 2", can be verified, there is no need to conduct verifications for the locations listed under "verification location 1."
If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in the vicinity of the main components (the section marked ④ in the circuit diagram circuit diagram).

NO.	Verification location 1	Verification location 2	Rated value 1	Rated value 2	Reference waveform
1	AOUT0	IC1601 pin-3 For CXK6113, include also CN1701 pin-37	2.2V and over	0.8V and lower	Waveform 3
2	SRCKAV	IC1601 pin-2 For CXK6113, include also CN1701 pin-38	2.2V and over	0.8V and lower	Waveform 3
4	LRCKAV	IC1701 pin-4 CXK6113, include also CN1701 pin-36	2.2V and over	0.8V and lower	Waveform 3

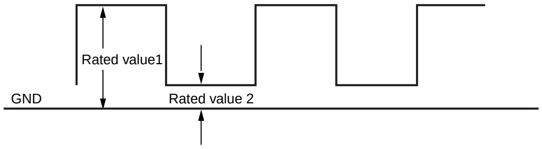


Figure 7: Three serial output rated values

Checks are conducted with the measurement circuit below.

NO.	Verification location 1	Verification location 2	Rated value	Reference waveform
4	LO	CN1701 15pin	1120±150mV	Waveform 4
5	RO	CN1702 12pin	1120±150mV	Waveform 4

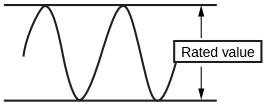


Figure 8: Analog audio outputs (LO and RO) rated values

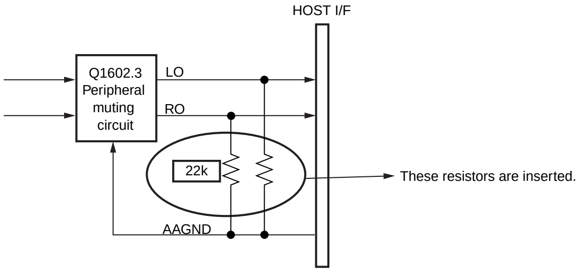
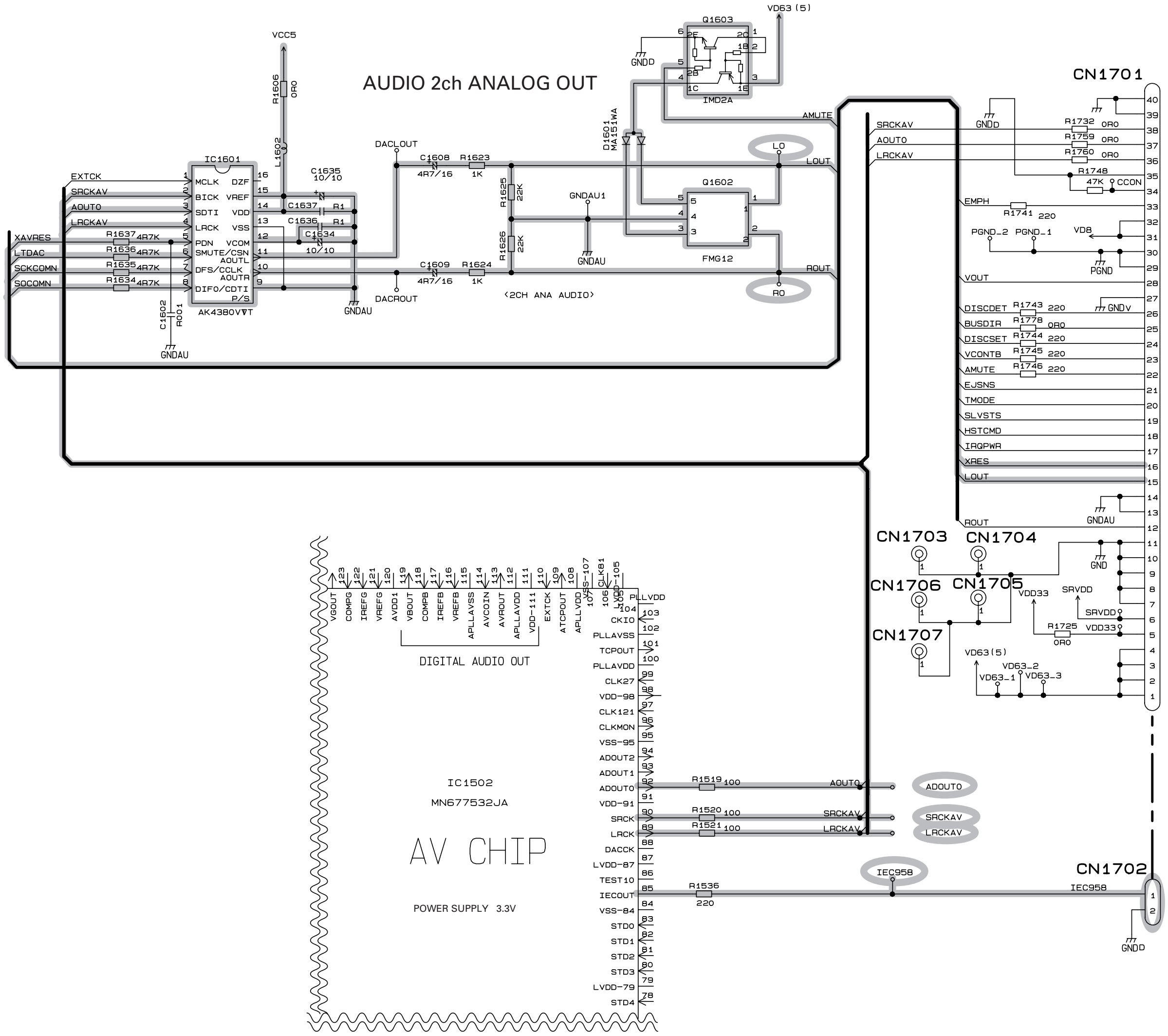

HOST I/F
Q1602.3 Peripheral muting circuit
LO
RO
22k
These resistors are inserted.
AAGND

Figure 9: LO and RO output measurement circuit

NO.	Verification location 1	Verification location 2	Rated value 1	Rated value 2	Reference waveform
6	IEC958	CN1702 2pin	2.2V and over	0.8V and lower	Waveform 5


AUDIO 2ch ANALOG OUT
VCC5
R1606
0R0
L1602
IC1601
AK4380VT
MCLK
BICK
SDTI
LRCK
PDN
SMUTE/CSN
DFS/CCLK
DIF0/CDTI
DZF
VREF
VDD
VSS
VCOM
AOUTL
AOUTR
P/S
EXTCK
SRCKAV
AOUT0
LRCKAV
XAVRES
LTDAC
SCKCOMN
SDCOMN
R1637
R1636
R1635
R1634
4R7K
C1602
R001
GNDAU
C1635
10/10
C1637
C1636
C1634
R1
DACLOUT
DACROUT
C1608
4R7/16
R1623
1K
C1609
R1624
R1625
R1626
22K
GNDAU1
<2CH ANA AUDIO>
D1601
MA151WA
Q1603
IMD2A
GNDD
VD63(5)
Q1602
FMG12
AMUTE
LOUT
ROUT
LO
RO
CN1701
SRCKAV
AOUT0
LRCKAV
R1732
R1759
R1760
0R0
R1748
47K
CCON
EMPH
R1741
220
PGND_2
PGND_1
VD8
PGND
VOUT
DISCDET
BUSDIR
DISCSET
VCONTB
AMUTE
EJSNS
TMODE
SLVSTS
HSTCMD
IRQPWR
XRES
LOUT
ROUT
R1743
R1778
R1744
R1745
R1746
GNDV
GNDAU
GND
CN1703
CN1704
CN1706
CN1705
CN1707
VDD33
SRVDD
R1725
VD63(5)
VD63_1
VD63_2
VD63_3
IC1502
MN677532JA
AV CHIP
POWER SUPPLY 3.3V
DIGITAL AUDIO OUT
VGOUT
COMPG
IREFG
VREFG
AVDD1
VBOUT
COMPB
IREFB
VREFB
APLLAVSS
AVCOIN
AVROUT
APLLAVDD
VDD-111
EXTCK
ATCPOUT
APLLVDD
VSS-107
CLK81
LVDD-105
PLLVDD
CKIO
PLLAVSS
TCPOUT
PLLAVDD
CLK27
VDD-98
CLK121
CLKMON
VSS-95
ADOUT2
ADOUT1
ADOUT0
VDD-91
SRCK
LRCK
DACCK
LVDD-87
TEST10
IECOUT
VSS-84
STD0
STD1
STD2
STD3
LVDD-79
STD4
R1519
R1520
R1521
100
R1536
220
ADOUT0
SRCKAV
LRCKAV
IEC958
CN1702
GNDD

Schematic diagram ④

Check 5: Is the video circuit operated normally?

Reproduce DVD-REF-A1 Title 2 Chapters (White 100IRE).
Monitor the output with the oscilloscope, by setting the COMPO signal to a GND reference.
Set the Trigger mode to the TV trigger, and the Trigger line to line-150.

NO.	Verification location (sensing pin)	Rated value	Reference waveform
1	COMPO	1.0±0.02Vpp	Waveform 6

If the result is not satisfactory, check to see if there are any problems with resin flux cored solder, parts and components, in the vicinity of line-150 (the section marked ⑤ in the circuit diagram) and peripheral components

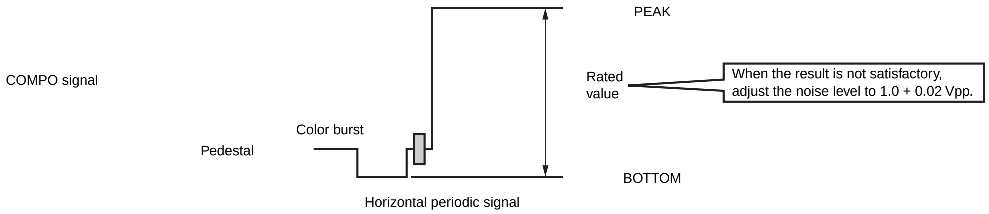
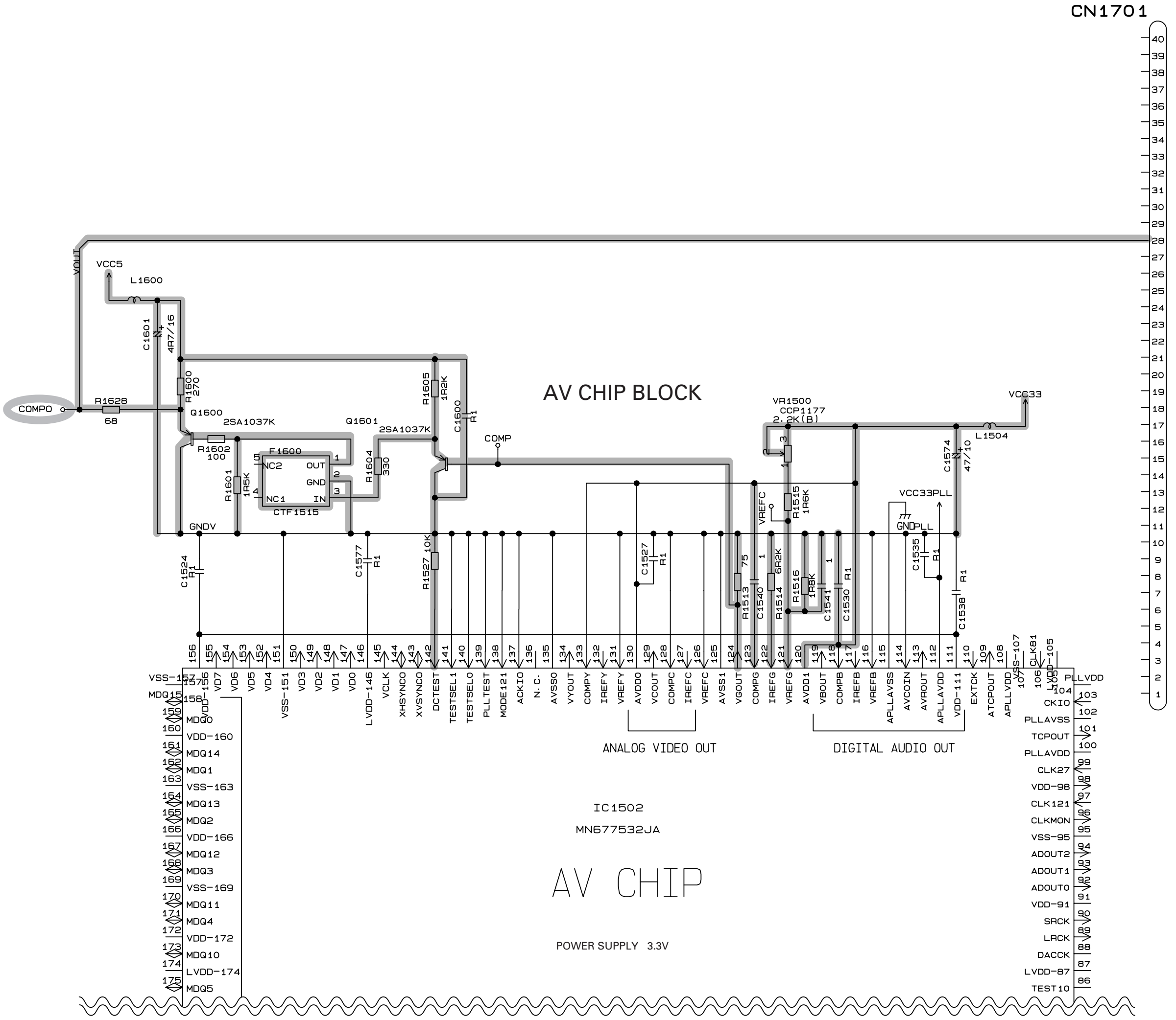

COMPO signal
Pedestal
Color burst
Horizontal periodic signal
PEAK
Rated value
BOTTOM
When the result is not satisfactory, adjust the noise level to 1.0 + 0.02 Vpp.

Figure 11: Composite signal 100% output waveform

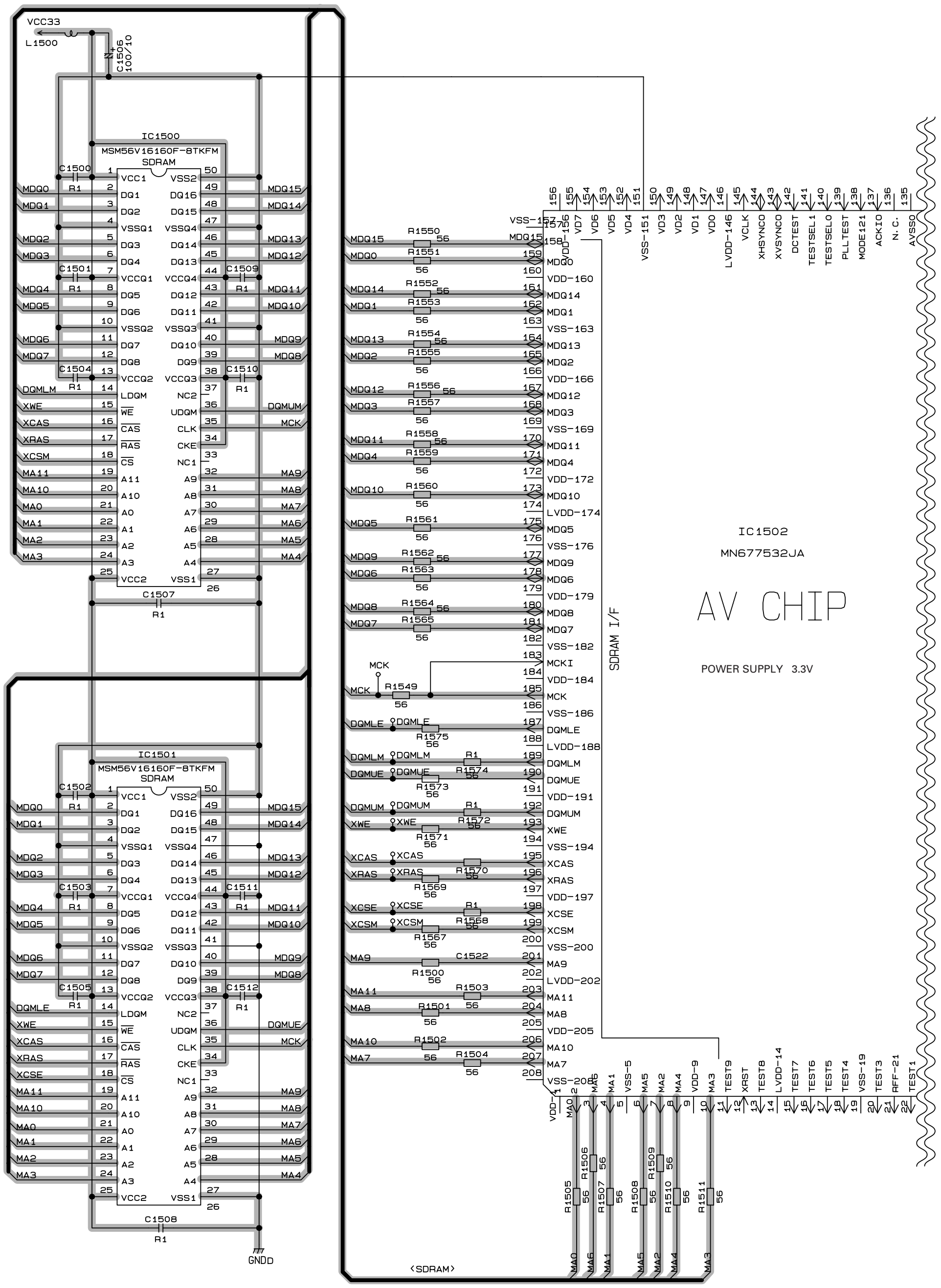

CN1701
AV CHIP BLOCK
VOUT
VCC5
L1600
C1601
4R7/16
COMPO
R1628
68
R1600
270
Q1600
2SA1037K
R1602
100
F1600
NC2
OUT
GND
NC1
IN
CTF1515
R1601
1R5K
GNDV
Q1601
2SA1037K
R1604
330
R1605
1R2K
C1600
R1
COMP
C1524
R1
C1577
R1
R1527 10K
C1527
R1
VR1500
CCP1177
2.2K(B)
VREFC
R1515
1R6K
R1513
75
C1540
1
R1514
6R2K
R1516
1R8K
C1541
1
C1530
R1
VCC33PLL
GNDPLL
C1535
R1
C1574
47/10
L1504
VCC33
C1538
R1
ANALOG VIDEO OUT
DIGITAL AUDIO OUT
IC1502
MN677532JA
AV CHIP
POWER SUPPLY 3.3V
VSS-157
MDQ15
VDD-156
VD7
VD6
VD5
VD4
VSS-151
VD3
VD2
VD1
VD0
LVDD-146
VCLK
XHSYNCO
XVSYNCO
DCTEST
TESTSEL1
TESTSEL0
PLLTEST
MODE121
ACKIO
N.C.
AVSS0
VYOUT
COMPY
IREFY
VREFY
AVDD0
VCOUT
COMPC
IREFC
VREFC
AVSS1
VGOUT
COMPG
IREFG
VREFG
AVDD1
VBOUT
COMPB
IREFB
VREFB
APLLAVSS
AVCOIN
AVROUT
APLLAVDD
VDD-111
EXTCK
ATCPOUT
APLLVDD
VSS-107
CLK81
LVDD-105
PLLVDD
CKIO
PLLAVSS
TCPOUT
PLLAVDD
CLK27
VDD-98
CLK121
CLKMON
VSS-95
ADOUT2
ADOUT1
ADOUT0
VDD-91
SRCK
LRCK
DACCK
LVDD-87
TEST10
MDQ0
VDD-160
MDQ14
MDQ1
VSS-163
MDQ13
MDQ2
VDD-166
MDQ12
MDQ3
VSS-169
MDQ11
MDQ4
VDD-172
MDQ10
LVDD-174
MDQ5

Schematic diagram ⑤

Check 6: Is SDRAM I/F operating normally?

Reproduce DVD-REF-A1 Title 1.
Verify the circuit described in Figure ⑥.
This check is the same for all DVD-V compatible modules.
Check the conductivity of both the "Verification location 1" and the "Verification location2."
If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in areas where a problem occurs, for the overall sequence of “output " input" of the checked location.

NO.	Signal name	Verification location 1	Verification location 2	Rated value	Others
1	MA0	IC1500/1501 21pin	IC1502 2pin	56Ω ± 5%	Same for both IC1500 and IC1501.
2	MA1	IC1500/1501 22pin	IC1502 4pin	56Ω ± 5%	Same for both IC1500 and IC1501.
3	MA2	IC1500/1501 23pin	IC1502 7pin	56Ω ± 5%	Same for both IC1500 and IC1501.
4	MA3	IC1500/1501 24pin	IC1502 10pin	56Ω ± 5%	Same for both IC1500 and IC1501.
5	MA4	IC1500/1501 27pin	IC1502 8pin	56Ω ± 5%	Same for both IC1500 and IC1501.
6	MA5	IC1500/1501 28pin	IC1502 6pin	56Ω ± 5%	Same for both IC1500 and IC1501.
7	MA6	IC1500/1501 29pin	IC1502 3pin	56Ω ± 5%	Same for both IC1500 and IC1501.
8	MA7	IC1500/1501 30pin	IC1502 207pin	56Ω ± 5%	Same for both IC1500 and IC1501.
9	MA8	IC1500/1501 31pin	IC1502 204pin	56Ω ± 5%	Same for both IC1500 and IC1501.
10	MA9	IC1500/1501 32pin	IC1502 201pin	56Ω ± 5%	Same for both IC1500 and IC1501.
11	MA10	IC1500/1501 20pin	IC1502 206pin	56Ω ± 5%	Same for both IC1500 and IC1501.
12	MA11	IC1500/1501 19pin	IC1502 203pin	56Ω ± 5%	Same for both IC1500 and IC1501.
13	MDQ0	IC1500/1501 2pin	IC1502 159pin	56Ω ± 5%	Same for both IC1500 and IC1501.
14	MDQ1	IC1500/1501 3pin	IC1502 162pin	56Ω ± 5%	Same for both IC1500 and IC1501.
15	MDQ2	IC1500/1501 5pin	IC1502 165pin	56Ω ± 5%	Same for both IC1500 and IC1501.
16	MDQ3	IC1500/1501 6pin	IC1502 168pin	56Ω ± 5%	Same for both IC1500 and IC1501.
17	MDQ4	IC1500/1501 8pin	IC1502 171pin	56Ω ± 5%	Same for both IC1500 and IC1501.
18	MDQ5	IC1500/1501 9pin	IC1502 175pin	56Ω ± 5%	Same for both IC1500 and IC1501.
19	MDQ6	IC1500/1501 11pin	IC1502 178pin	56Ω ± 5%	Same for both IC1500 and IC1501.
20	MDQ7	IC1500/1501 12pin	IC1502 181pin	56Ω ± 5%	Same for both IC1500 and IC1501.
21	MDQ8	IC1500/1501 39pin	IC1502 180pin	56Ω ± 5%	Same for both IC1500 and IC1501.
22	MDQ9	IC1500/1501 40pin	IC1502 177pin	56Ω ± 5%	Same for both IC1500 and IC1501.
23	MDQ10	IC1500/1501 42pin	IC1502 173pin	56Ω ± 5%	Same for both IC1500 and IC1501.
24	MDQ11	IC1500/1501 43pin	IC1502 170pin	56Ω ± 5%	Same for both IC1500 and IC1501.
25	MDQ12	IC1500/1501 45pin	IC1502 167pin	56Ω ± 5%	Same for both IC1500 and IC1501.
26	MDQ13	IC1500/1501 46pin	IC1502 164pin	56Ω ± 5%	Same for both IC1500 and IC1501.
27	MDQ14	IC1500/1501 48pin	IC1502 161pin	56Ω ± 5%	Same for both IC1500 and IC1501.
28	MDQ15	IC1500/1501 49pin	IC1502 158pin	56Ω ± 5%	Same for both IC1500 and IC1501.
29	MCK	IC1500/1501 35pin	IC1502 185pin	56Ω ± 5%	Same for both IC1500 and IC1501.
30	XWE	IC1500/1501 15pin	IC1502 193pin	56Ω ± 5%	Same for both IC1500 and IC1501.
31	XCAS	IC1500/1501 16pin	IC1502 195pin	56Ω ± 5%	Same for both IC1500 and IC1501.
32	XRAS	IC1500/1501 17pin	IC1502 196pin	56Ω ± 5%	Same for both IC1500 and IC1501.
33	XCSM	IC1500 18pin	IC1502 199pin	56Ω ± 5%	Same for both IC1500 and IC1501.
34	XCSE	IC1501 18pin	IC1502 198pin	56Ω ± 5%	
35	DQMUM	IC1500 14pin	IC1502 192pin	56Ω ± 5%	
36	DQMLM	IC1500 36pin	IC1502 189pin	56Ω ± 5%	
37	DQMUE	IC1500 14pin	IC1502 190pin	56Ω ± 5%	
38	DQMLE	IC1500 36pin	IC1502 187pin	56Ω ± 5%	

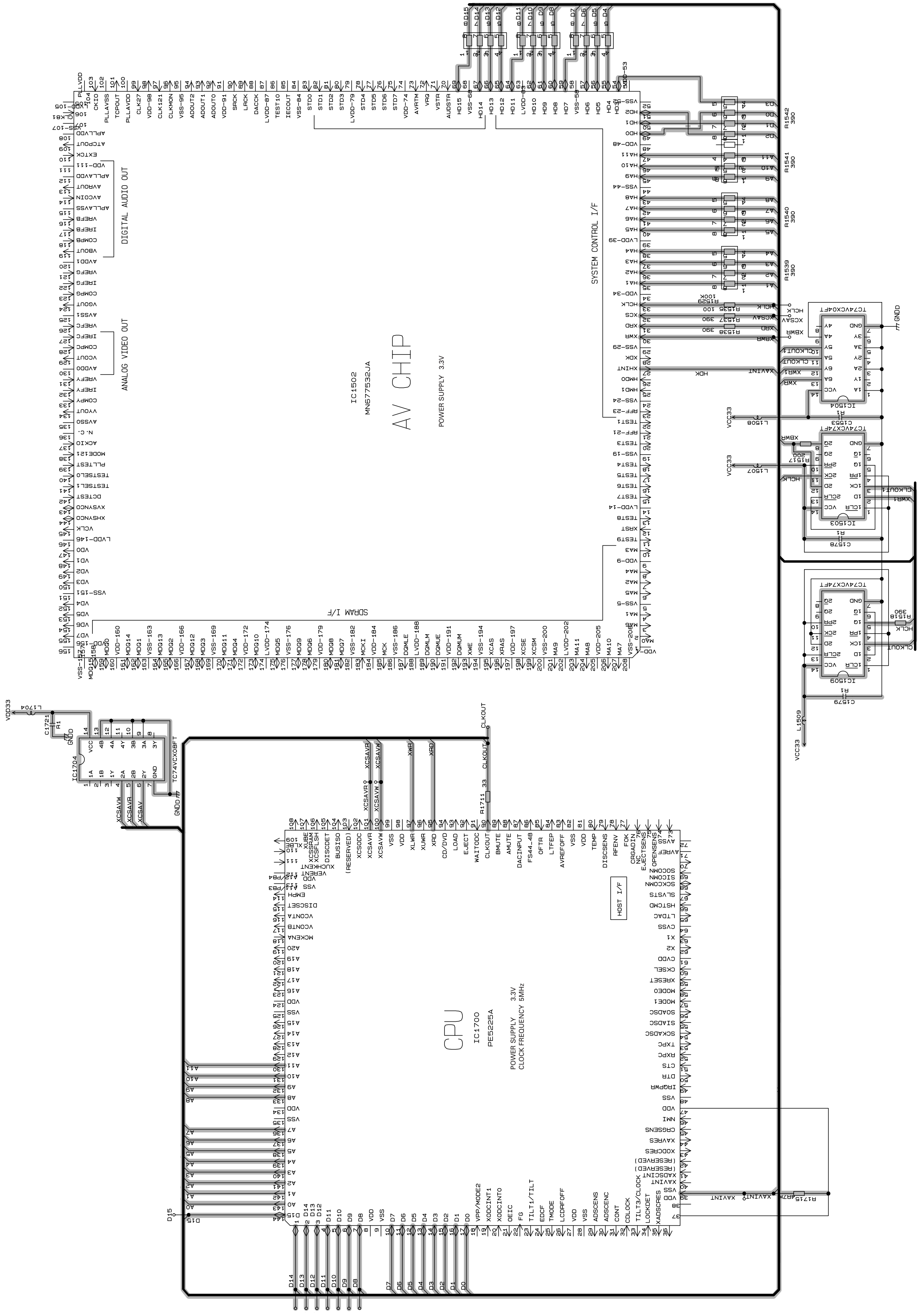

VCC33
L1500
C1506
100/10
IC1500
MSM56V16160F-8TKFM
SDRAM
IC1501
MSM56V16160F-8TKFM
SDRAM
C1500
C1501
C1502
C1503
C1504
C1505
C1507
C1508
C1509
C1510
C1511
C1512
R1
VCC1
VSS2
DQ1
DQ16
DQ2
DQ15
VSSQ1
VSSQ4
DQ3
DQ14
DQ4
DQ13
VCCQ1
VCCQ4
DQ5
DQ12
DQ6
DQ11
VSSQ2
VSSQ3
DQ7
DQ10
DQ8
DQ9
VCCQ2
VCCQ3
LDQM
NC2
WE
UDQM
CAS
CLK
RAS
CKE
CS
NC1
A11
A9
A10
A8
A0
A7
A1
A6
A2
A5
A3
A4
VCC2
VSS1
MDQ0
MDQ1
MDQ2
MDQ3
MDQ4
MDQ5
MDQ6
MDQ7
MDQ8
MDQ9
MDQ10
MDQ11
MDQ12
MDQ13
MDQ14
MDQ15
DQMLM
DQMLE
DQMUM
DQMUE
XWE
XCAS
XRAS
XCSM
XCSE
MCK
MA0
MA1
MA2
MA3
MA4
MA5
MA6
MA7
MA8
MA9
MA10
MA11
GNDD
R1550
R1551
R1552
R1553
R1554
R1555
R1556
R1557
R1558
R1559
R1560
R1561
R1562
R1563
R1564
R1565
R1549
R1575
R1574
R1573
R1572
R1571
R1570
R1569
R1568
R1567
R1500
R1501
R1502
R1503
R1504
R1505
R1506
R1507
R1508
R1509
R1510
R1511
C1522
56
IC1502
MN677532JA
AV CHIP
POWER SUPPLY 3.3V
SDRAM I/F
<SDRAM>
VSS-157
VDD-156
VD7
VD6
VD5
VD4
VSS-151
VD3
VD2
VD1
VD0
LVDD-146
VCLK
XHSYNCO
XVSYNCO
DCTEST
TESTSEL1
TESTSEL0
PLLTEST
MODE121
ACKIO
N. C.
AVSS0
VDD-160
VSS-163
VDD-166
VSS-169
VDD-172
LVDD-174
VSS-176
VDD-179
VSS-182
MCKI
VDD-184
VSS-186
LVDD-188
VDD-191
VSS-194
VDD-197
VSS-200
LVDD-202
VDD-205
VSS-208
VDD-1
VSS-5
VDD-9
TEST9
XRST
TEST8
LVDD-14
TEST7
TEST6
TEST5
TEST4
VSS-19
TEST3
RFF-21
TEST1

Schematic diagram ⑥

Check 7: Is the microprocessor operating normally?

Verify the circuit described in Figure ⑦.
This check is the same for all DVD-V compatible modules.
Check the conductivity of both the "Verification location 1" and the "Verification location2."
If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in areas where a problem occurs, for the overall sequence of "output – input" of the checked location.

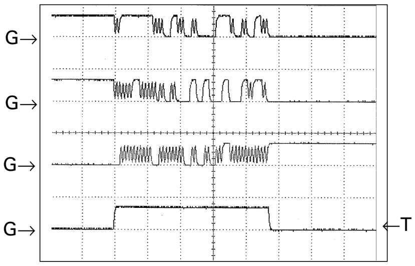
NO.	Signal name	Verification location 1	Verification location 2	Verification Media	Rated value	Others
1	A1	IC1700 142pin	IC1502 35pin	ALL	390Ω ± 5%	
2	A2	IC1700 141pin	IC1502 36pin	ALL	390Ω ± 5%	
3	A3	IC1700 140pin	IC1502 37pin	ALL	390Ω ± 5%	
4	A4	IC1700 139pin	IC1502 38pin	ALL	390Ω ± 5%	
5	A5	IC1700 138pin	IC1502 40pin	ALL	390Ω ± 5%	
6	A6	IC1700 137pin	IC1502 41pin	ALL	390Ω ± 5%	
7	A7	IC1700 136pin	IC1502 42pin	ALL	390Ω ± 5%	
8	A8	IC1700 133pin	IC1502 43pin	ALL	390Ω ± 5%	
9	A9	IC1700 132pin	IC1502 45pin	ALL	390Ω ± 5%	
10	A10	IC1700 131pin	IC1502 46pin	ALL	390Ω ± 5%	
11	A11	IC1700 130pin	IC1502 47pin	ALL	390Ω ± 5%	
12	D0	IC1700 17pin	IC1502 49pin	ALL	390Ω ± 5%	
13	D1	IC1700 16pin	IC1502 50pin	ALL	390Ω ± 5%	
14	D2	IC1700 15pin	IC1502 51pin	ALL	390Ω ± 5%	
15	D3	IC1700 14pin	IC1502 54pin	ALL	390Ω ± 5%	
16	D4	IC1700 13pin	IC1502 55pin	ALL	390Ω ± 5%	
17	D5	IC1700 12pin	IC1502 56pin	ALL	390Ω ± 5%	
18	D6	IC1700 11pin	IC1502 57pin	ALL	390Ω ± 5%	
19	D7	IC1700 10pin	IC1502 59pin	ALL	390Ω ± 5%	
20	D8	IC1700 7pin	IC1502 60pin	ALL	390Ω ± 5%	
21	D9	IC1700 6pin	IC1502 61pin	ALL	390Ω ± 5%	
22	D10	IC1700 5pin	IC1502 62pin	ALL	390Ω ± 5%	
23	D11	IC1700 4pin	IC1502 64pin	ALL	390Ω ± 5%	
24	D12	IC1700 3pin	IC1502 65pin	ALL	390Ω ± 5%	
25	D13	IC1700 2pin	IC1502 66pin	ALL	390Ω ± 5%	
26	D14	IC1700 1pin	IC1502 67pin	ALL	390Ω ± 5%	
27	D15	IC1700 144pin	IC1502 69pin	ALL	390Ω ± 5%	
28	XCSAVR	IC1700 101pin	IC1704 5pin	ALL	0Ω	
29	XCSAVW	IC1700 100pin	IC1704 4pin	ALL	0Ω	
30	XCSAV	IC1704 6pin	IC1502 32pin	ALL	390Ω ± 5%	
31	XAVINT	IC1700 39pin	IC1502 27pin	ALL	0Ω	
32	XRD	IC1700 95pin	IC1502 31pin	ALL	390Ω ± 5%	
33	CLKOUT	IC1700 90pin	IC1509 3pin	ALL	33Ω	Dividing circuit For verification location 1, include also IC1054 pin-11
34	HCLK	IC1509 5pin	IC1502 33pin	ALL	200Ω ± 5%	
35	XWR	IC1700 97pin	IC1504 13pin	ALL	0Ω	
36	XBWR	IC1503 8pin	IC1502 30pin	ALL	200Ω ± 5%	


AV CHIP
IC1502
MN67532JA
POWER SUPPLY 3.3V
DIGITAL AUDIO OUT
ANALOG VIDEO OUT
SYSTEM CONTROL I/F
SDRAM I/F
CPU
IC1700
PE5225A
POWER SUPPLY 3.3V
CLOCK FREQUENCY 5MHz
HOST I/F
IC1503
TC74VCX74FT
IC1504
TC74VCX04FT
IC1509
TC74VCX74FT
IC1704
TC74VCX08FT
R1539 390
R1540 390
R1541 390
R1542 390
R1529 100K
R1535 100
R1537 390
R1538 390
R1517 200
R1518 390
R1711 33
R1715 47K
C1553
C1578
C1579
C1721
L1507
L1508
L1509
L1704
VCC33
VDD33
GNDD
CLKOUT
XCSAVR
XCSAVW
XCSAV
XWR
XRD
XBWR
HCLK
XAVINT
HDK
CLKOUT1
XWR1
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11

Schematic diagram ⑦

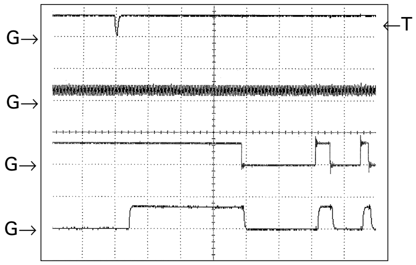
Note:1. The encircled number denote measuring pointes in the circuit diagram.
2. Reference voltage VHALF : 1.65V

⑪ CH1: STD1
⑫ CH2: STD4
⑬ CH3: STD7
⑭ CH4: STENABLE
5V/div. 2μs/div.



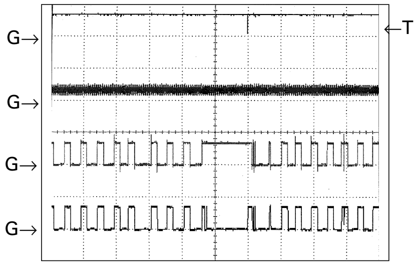
Waveform1

⑮ CH1: AVRTM
⑯ CH2: STCLK
⑰ CH3: STVALID
⑭ CH4: STENABLE
5V/div. 2μs/div.



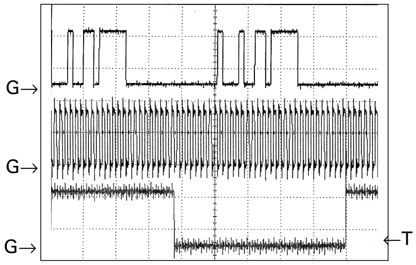
Waveform2(1)

⑮ CH1: AVRTM
⑯ CH2: STCLK
⑰ CH3: STVALID
⑭ CH4: STENABLE
5V/div. 50μs/div.



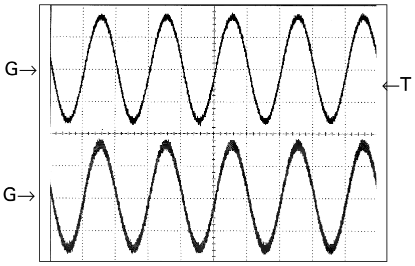
Waveform2(2)

⑱ CH1: AOUT0
⑲ CH2: SRCKAV
⑳ CH3: LRCKAV
2V/div. 2μs/div.



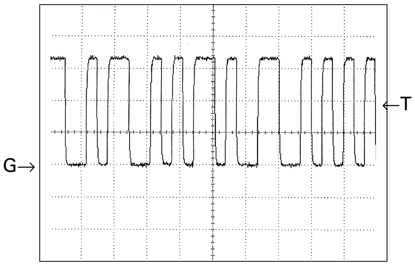
Waveform3

㉒ CH1: LO
㉓ CH2: RO
1V/div. 500μs/div.



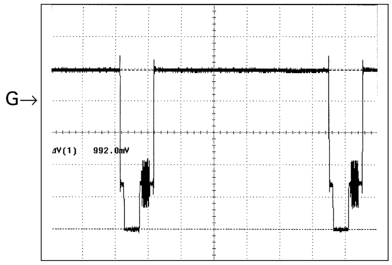
Waveform4

㉑ CH1: IEC958 1V/div. 500ns/div.



Waveform5

㉔ CH1: COMPO 200mV/div. 10μs/div.
[White 100% output]



Waveform6

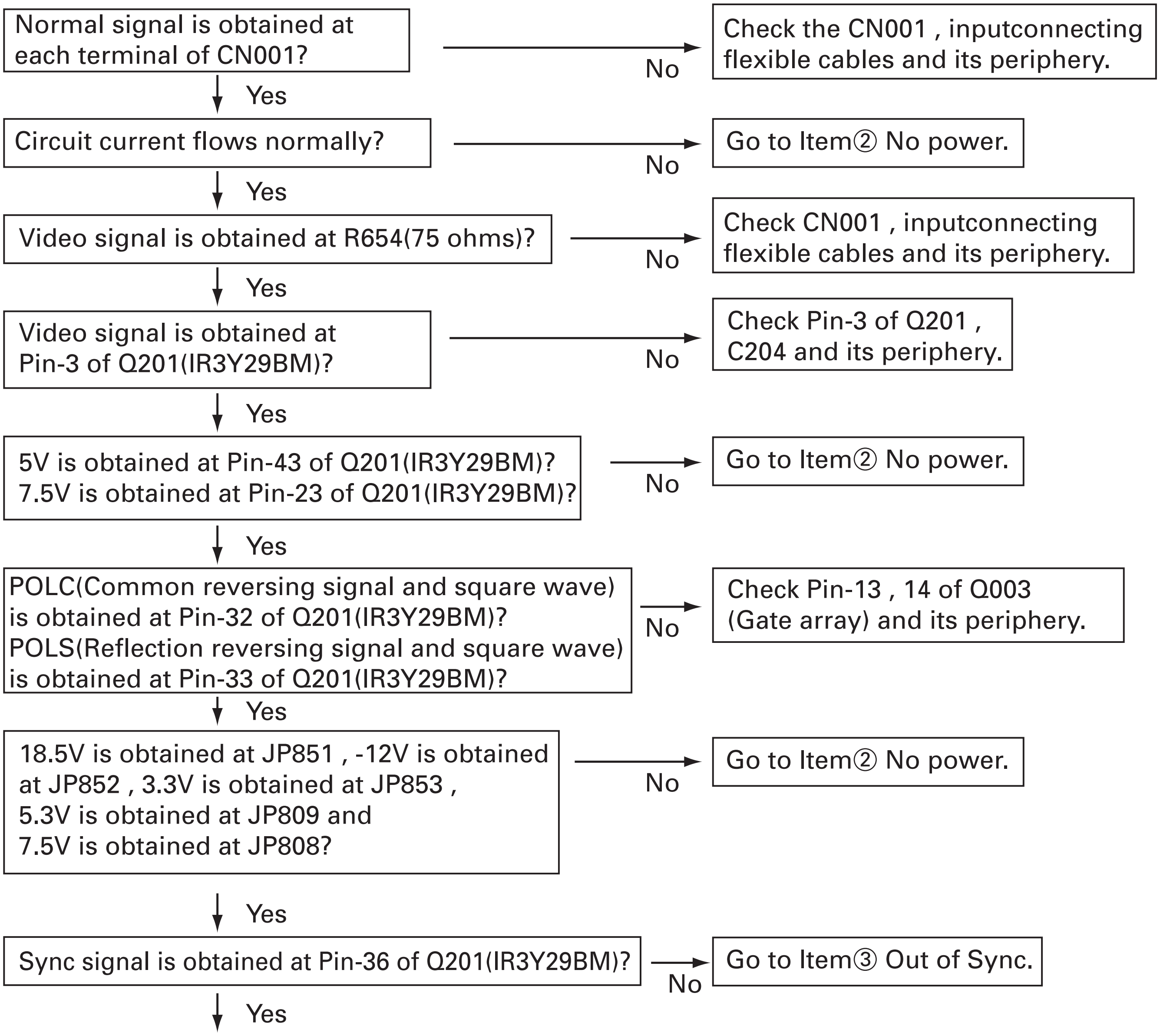
7 GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 TROUBLESHOOTING

● LCD module troubleshooting

①No images



Normal signal is obtained at each terminal of CN001?

No → Check the CN001 , inputconnecting flexible cables and its periphery.

Yes ↓

Circuit current flows normally?

No → Go to Item② No power.

Yes ↓

Video signal is obtained at R654(75 ohms)?

No → Check CN001 , inputconnecting flexible cables and its periphery.

Yes ↓

Video signal is obtained at Pin-3 of Q201(IR3Y29BM)?

No → Check Pin-3 of Q201 , C204 and its periphery.

Yes ↓

5V is obtained at Pin-43 of Q201(IR3Y29BM)?
7.5V is obtained at Pin-23 of Q201(IR3Y29BM)?

No → Go to Item② No power.

Yes ↓

POLC(Common reversing signal and square wave) is obtained at Pin-32 of Q201(IR3Y29BM)?
POLS(Reflection reversing signal and square wave) is obtained at Pin-33 of Q201(IR3Y29BM)?

No → Check Pin-13 , 14 of Q003 (Gate array) and its periphery.

Yes ↓

18.5V is obtained at JP851 , -12V is obtained at JP852 , 3.3V is obtained at JP853 , 5.3V is obtained at JP809 and 7.5V is obtained at JP808?

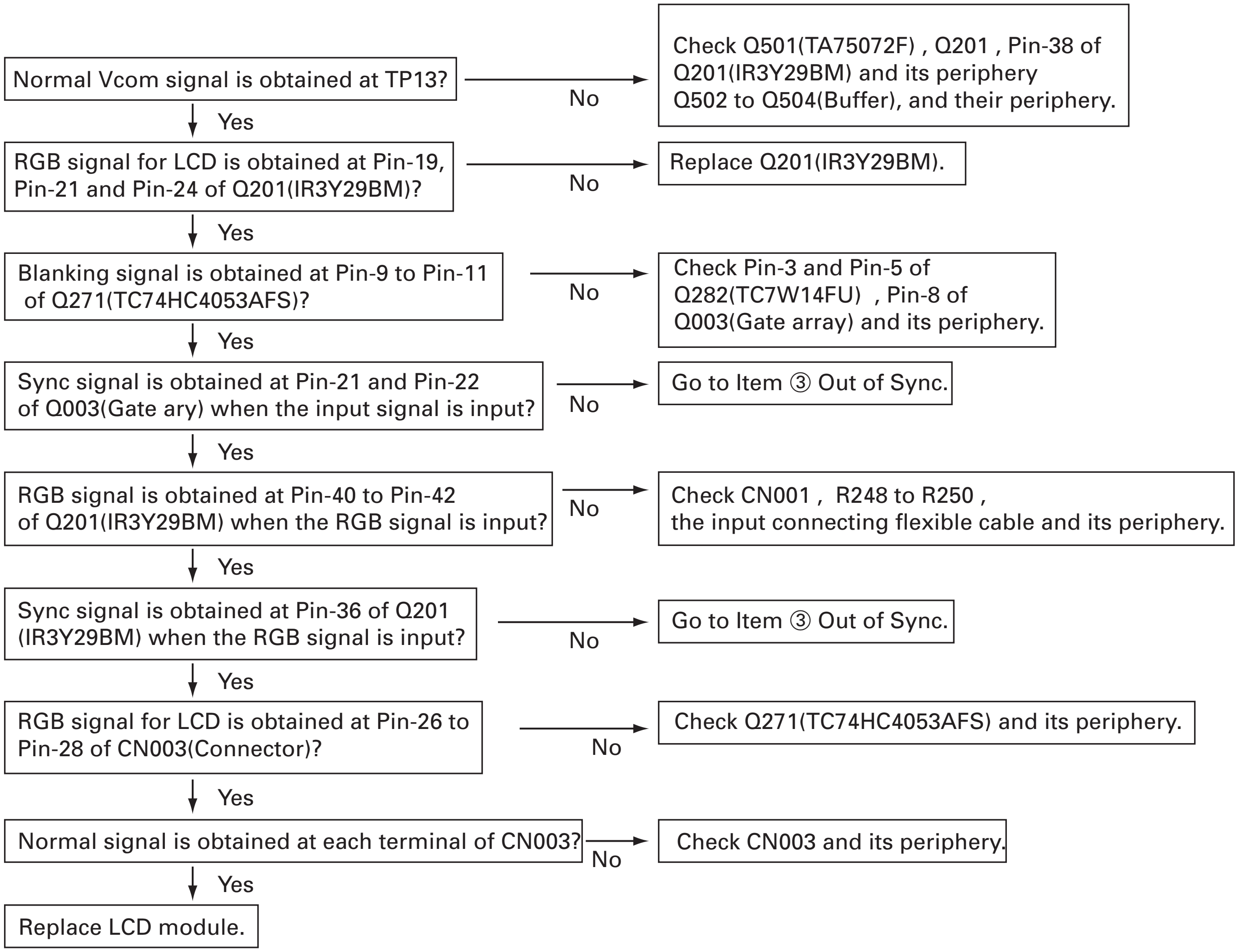
No → Go to Item② No power.

Yes ↓

Sync signal is obtained at Pin-36 of Q201(IR3Y29BM)?

No → Go to Item③ Out of Sync.

Yes ↓



Normal Vcom signal is obtained at TP13?

Check Q501(TA75072F) , Q201 , Pin-38 of Q201(IR3Y29BM) and its periphery Q502 to Q504(Buffer), and their periphery.

RGB signal for LCD is obtained at Pin-19, Pin-21 and Pin-24 of Q201(IR3Y29BM)?

Replace Q201(IR3Y29BM).

Blanking signal is obtained at Pin-9 to Pin-11 of Q271(TC74HC4053AFS)?

Check Pin-3 and Pin-5 of Q282(TC7W14FU) , Pin-8 of Q003(Gate array) and its periphery.

Sync signal is obtained at Pin-21 and Pin-22 of Q003(Gate ary) when the input signal is input?

Go to Item ③ Out of Sync.

RGB signal is obtained at Pin-40 to Pin-42 of Q201(IR3Y29BM) when the RGB signal is input?

Check CN001 , R248 to R250 , the input connecting flexible cable and its periphery.

Sync signal is obtained at Pin-36 of Q201 (IR3Y29BM) when the RGB signal is input?

Go to Item ③ Out of Sync.

RGB signal for LCD is obtained at Pin-26 to Pin-28 of CN003(Connector)?

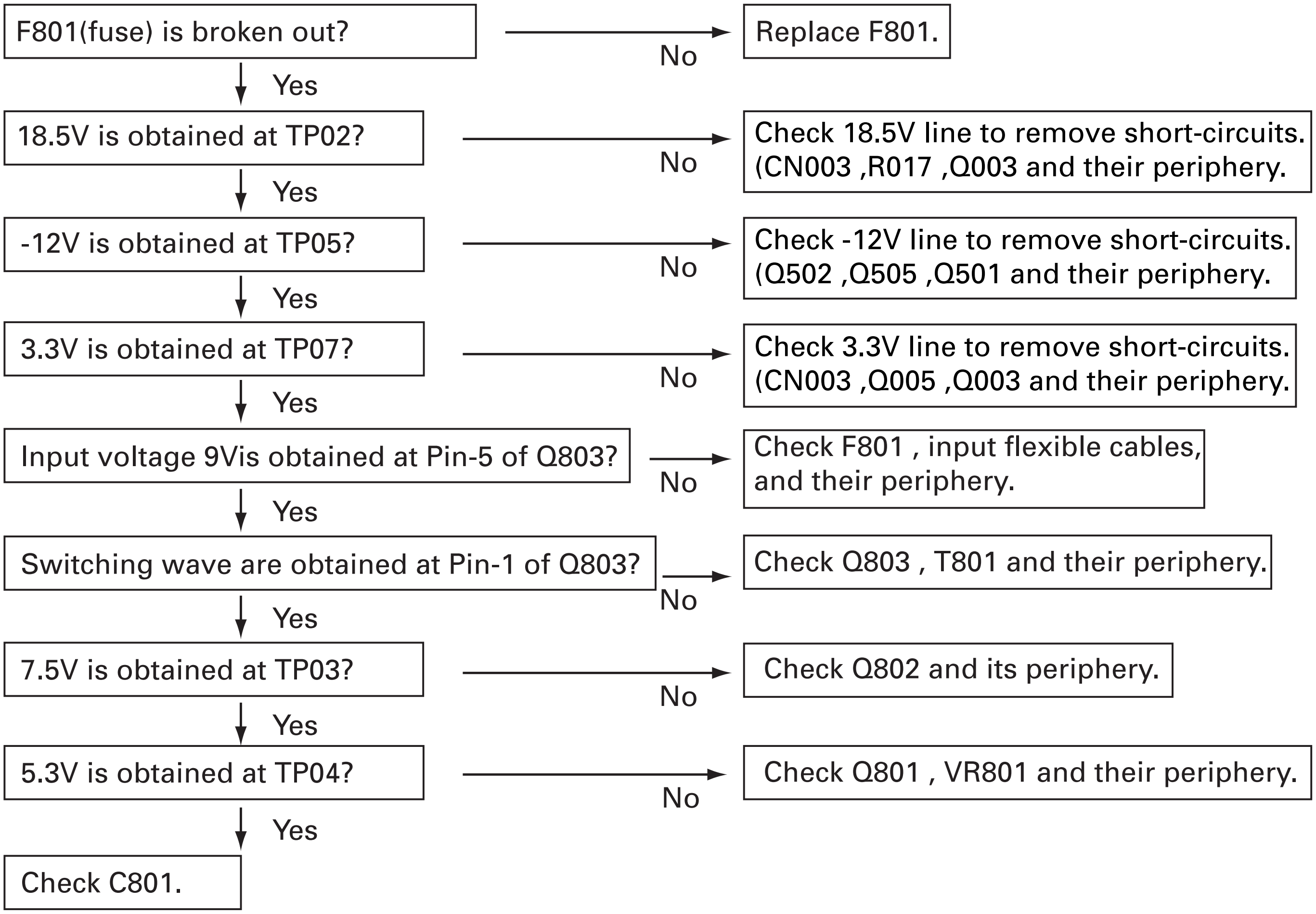
Check Q271(TC74HC4053AFS) and its periphery.

Normal signal is obtained at each terminal of CN003?

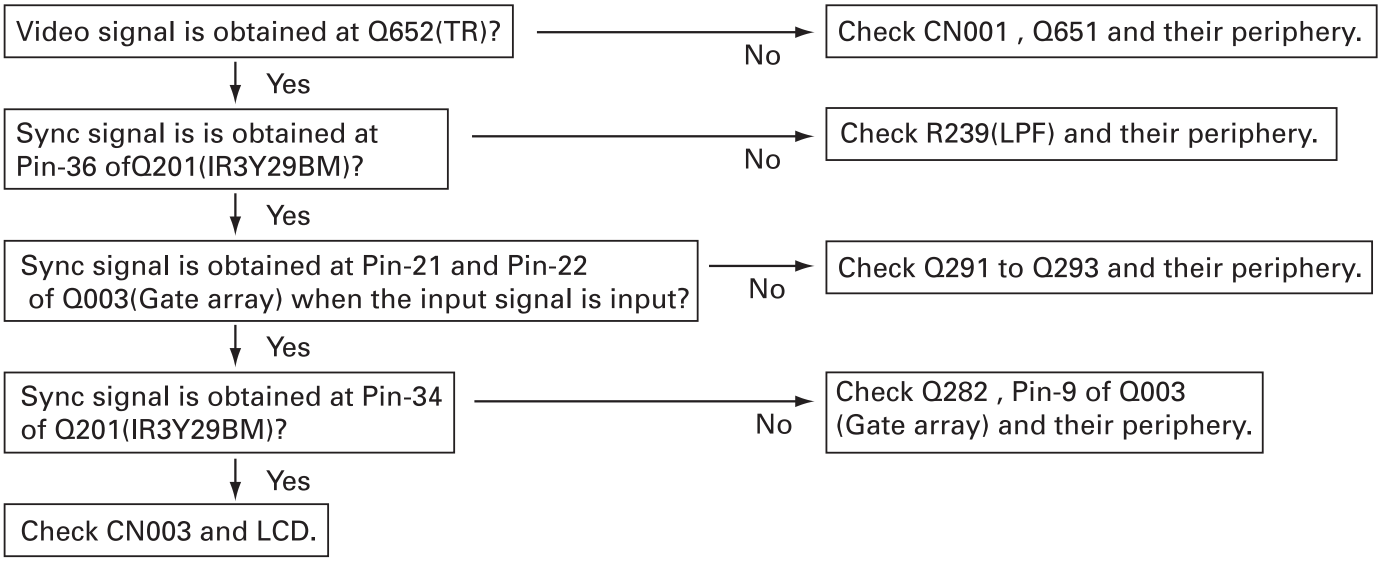
Check CN003 and its periphery.

Replace LCD module.

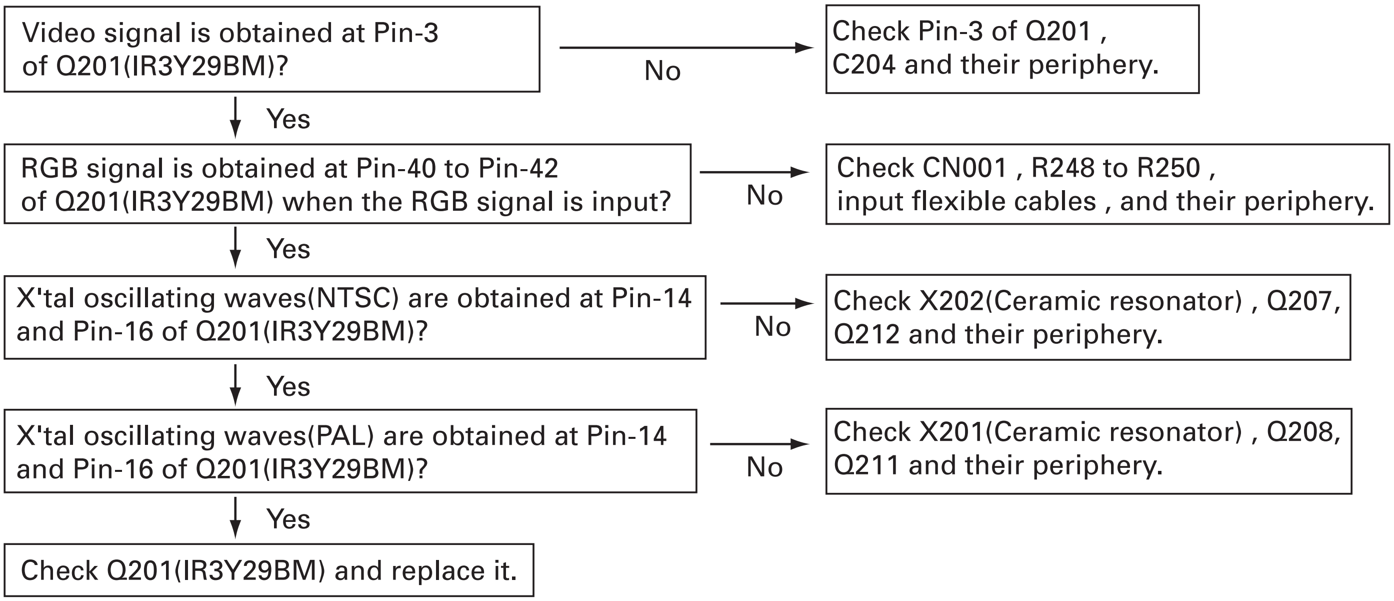
②No power


F801(fuse) is broken out?
No
Replace F801.
Yes
18.5V is obtained at TP02?
No
Check 18.5V line to remove short-circuits. (CN003 ,R017 ,Q003 and their periphery.
Yes
-12V is obtained at TP05?
No
Check -12V line to remove short-circuits. (Q502 ,Q505 ,Q501 and their periphery.
Yes
3.3V is obtained at TP07?
No
Check 3.3V line to remove short-circuits. (CN003 ,Q005 ,Q003 and their periphery.
Yes
Input voltage 9Vis obtained at Pin-5 of Q803?
No
Check F801 , input flexible cables, and their periphery.
Yes
Switching wave are obtained at Pin-1 of Q803?
No
Check Q803 , T801 and their periphery.
Yes
7.5V is obtained at TP03?
No
Check Q802 and its periphery.
Yes
5.3V is obtained at TP04?
No
Check Q801 , VR801 and their periphery.
Yes
Check C801.

③Out of Sync


Video signal is obtained at Q652(TR)?
No
Check CN001 , Q651 and their periphery.
Yes
Sync signal is is obtained at Pin-36 ofQ201(IR3Y29BM)?
No
Check R239(LPF) and their periphery.
Yes
Sync signal is obtained at Pin-21 and Pin-22 of Q003(Gate array) when the input signal is input?
No
Check Q291 to Q293 and their periphery.
Yes
Sync signal is obtained at Pin-34 of Q201(IR3Y29BM)?
No
Check Q282 , Pin-9 of Q003 (Gate array) and their periphery.
Yes
Check CN003 and LCD.

④No color


Video signal is obtained at Pin-3 of Q201(IR3Y29BM)?
No
Check Pin-3 of Q201 , C204 and their periphery.
Yes
RGB signal is obtained at Pin-40 to Pin-42 of Q201(IR3Y29BM) when the RGB signal is input?
No
Check CN001 , R248 to R250 , input flexible cables , and their periphery.
Yes
X'tal oscillating waves(NTSC) are obtained at Pin-14 and Pin-16 of Q201(IR3Y29BM)?
No
Check X202(Ceramic resonator) , Q207, Q212 and their periphery.
Yes
X'tal oscillating waves(PAL) are obtained at Pin-14 and Pin-16 of Q201(IR3Y29BM)?
No
Check X201(Ceramic resonator) , Q208, Q211 and their periphery.
Yes
Check Q201(IR3Y29BM) and replace it.

7.1.2 DISASSEMBLY

● Cautions for disassembling and reassembling

1. When pulling chassis and case unit apart, remove gear, remove five screws, and then remove set of shaft unit before sliding case unit out. When reassembling, the switch on the SW PCB become caught by the parts, so keep the two screws of A as well as the SW PCB removed while reinstalling the case unit.

2. When reinstalling the shaft unit, please make sure that the teeth on the right and left side are aligned properly.

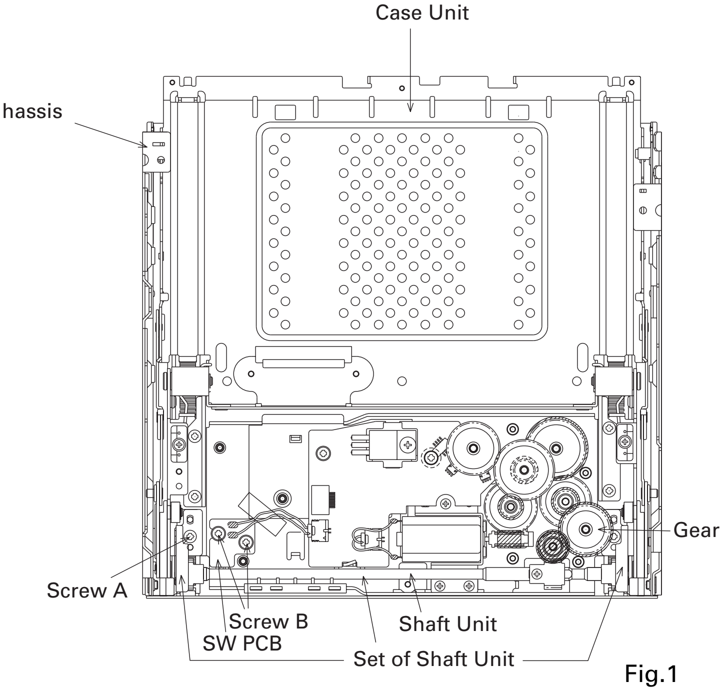


Fig.1

3. Please do not attempt to operate the drive mechanism when the grill is not attached (as doing so can cause the guides A and B to be caught by the edge of the chassis, resulting in damage to these parts).
4. Please remember to reapply grease on applicable parts, when servicing gears and related parts.
Gears : GEM1013(Gear)
GGM1034(Rack and all boards)

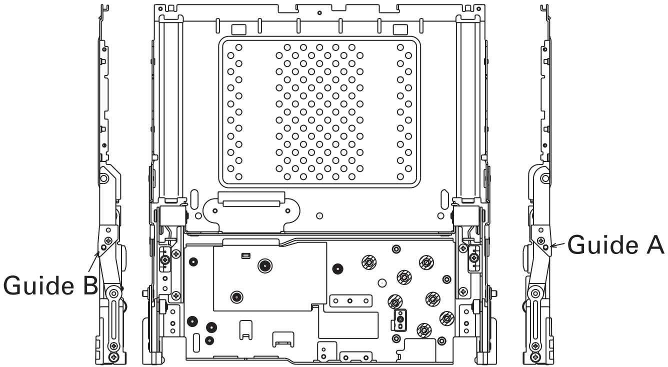
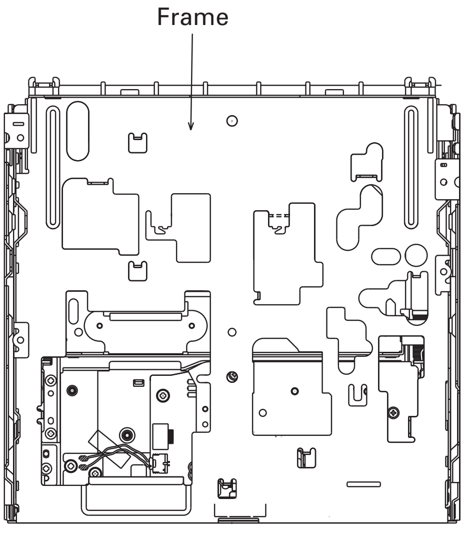


Fig.2



5. Please be careful, when reassembling the frame that the chassis is not spread open too widely.
Further, please be careful that damage or scratches to the monitor or grill does not occur (it may be advisable to apply protective tapes on these parts, making sure that the tape does not hinder the drive mechanism's operation).

Fig.3

● Removing the Holder (Fig.4)

1 Remove the four screws and then remove the Holder.

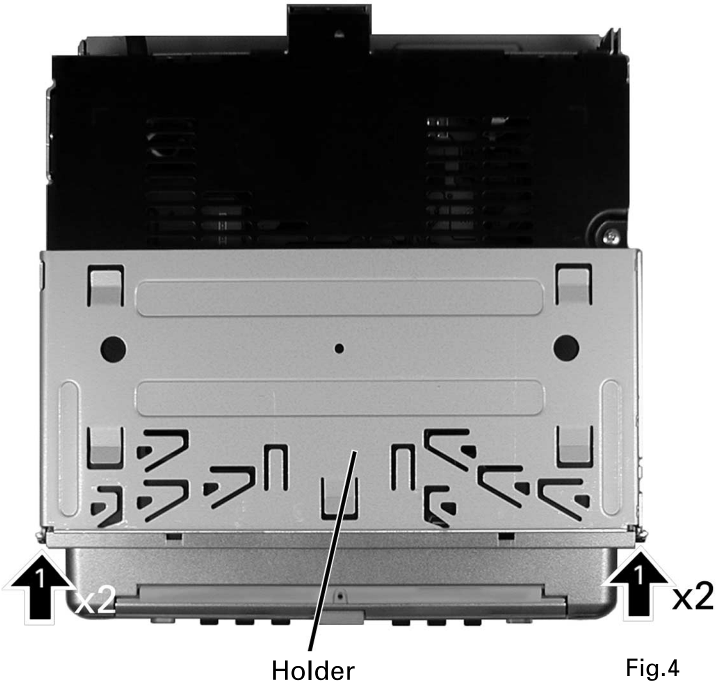

1
x2
1
x2
Holder

Fig.4

● Removing the Case (Fig.5)

1 Remove the six screws and then remove the Case.

● Removing the Bracket (Fig.5)

2 Remove the two screws and then remove the two Brackets.

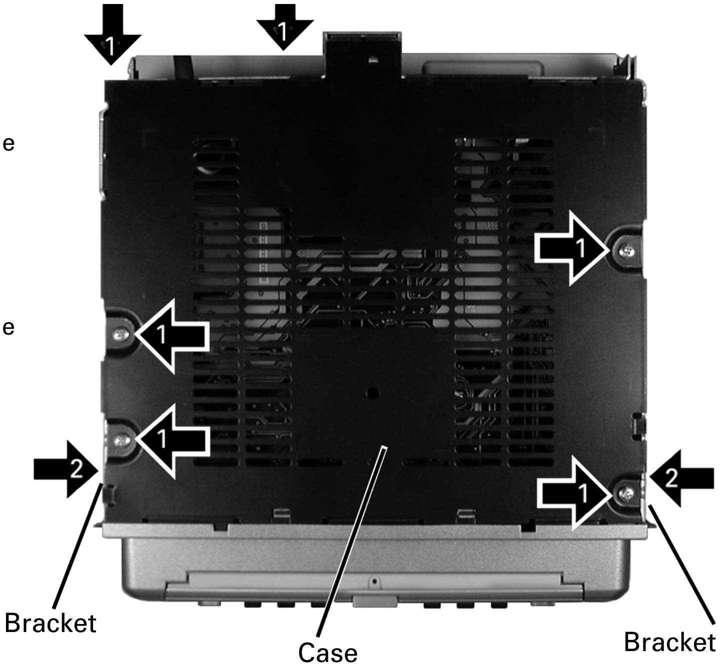

1
1
1
1
1
1
2
2
Bracket
Case
Bracket

Fig.5

● Removing the DVD Mechanism Module (Fig.6)

1 Remove the screw and then remove the Extension PCB.

Disconnect the connector and then remove the DVD Mechanism Module.

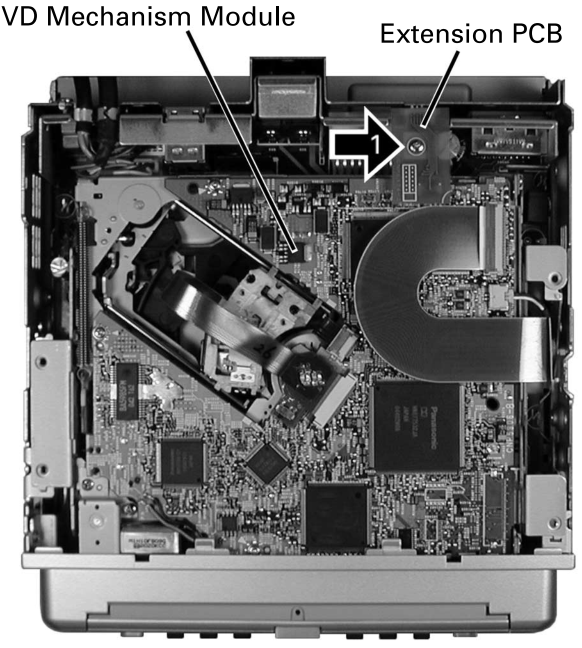

DVD Mechanism Module
Extension PCB
1

Fig.6

● Removing the Grille Assy (Fig.7)

1 Remove the two screws, remove the connector and then remove the Grille Assy.

● Removing the Control PCB (Fig.7)

2 Straight the tabs at six locations indicated.

3 Remove the screw.

The Control PCB is raised a little.

Connected connector on the other side is removed then remove the Control PCB.

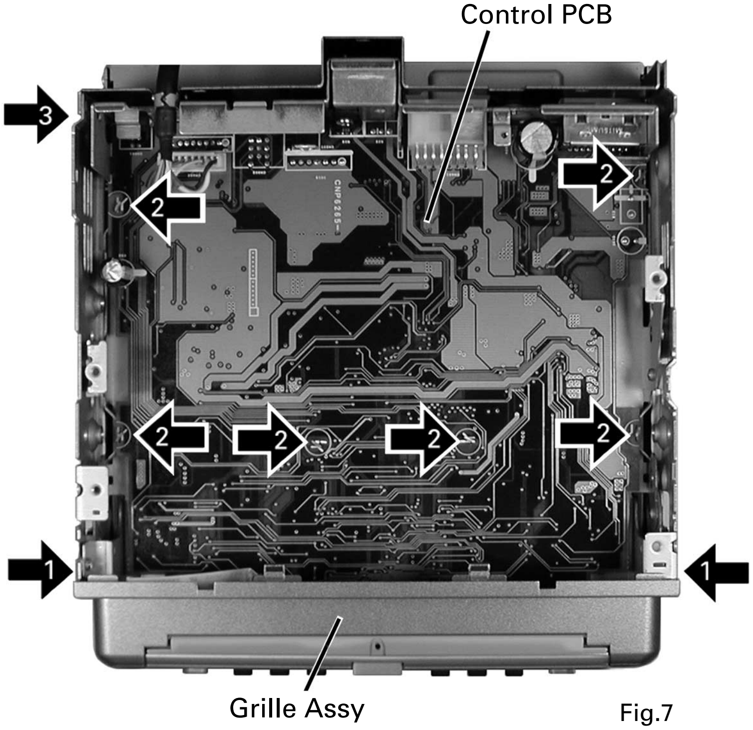

Control PCB
3
2
2
2
2
2
2
1
1
Grille Assy

Fig.7

● Removing the Frame (Fig.8)

1 Remove the eight screws and then remove the Frame.

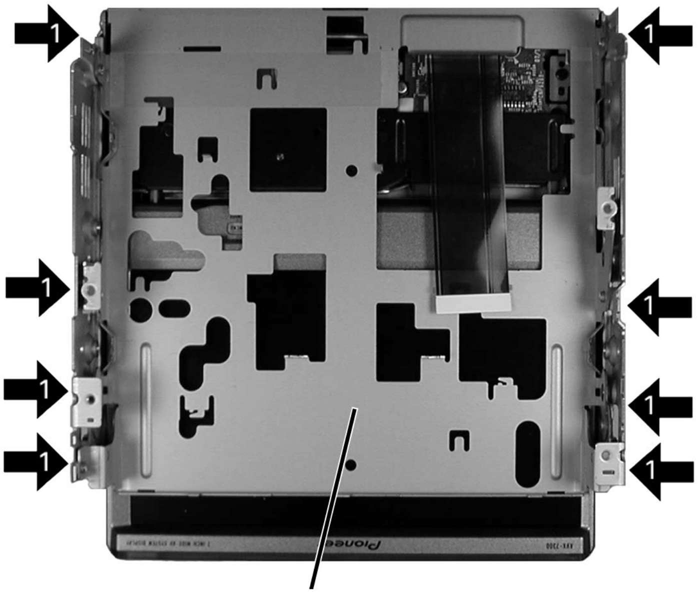

1
1
1
1
1
1
1
1
Frame

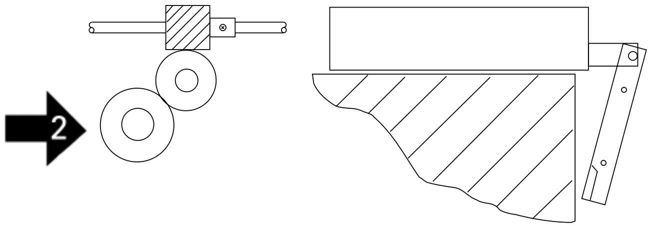
Fig.8

● Pull out the Display Assy (Fig.9)

1 Remove the four and two screws, remove the two covers.

2 Remove the gear.

3 Pull out the Display Assy.



Display assy becomes such a condition.

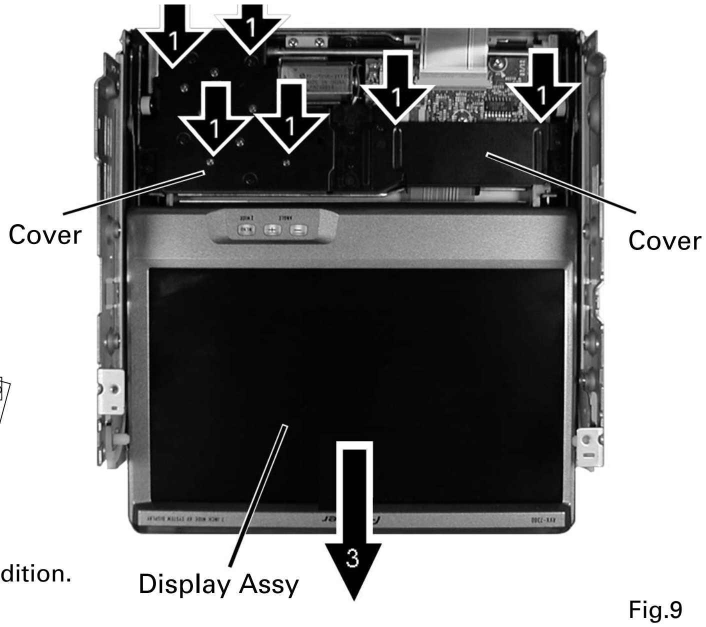

1
1
1
1
1
1
Cover
Cover
3
Display Assy

Fig.9

● Removing the LCD Module (Fig.10)

1 Remove the three screws and then remove the Cover.

2 Remove the four screws.

Disconnect the connector and then remove the LCD Module.

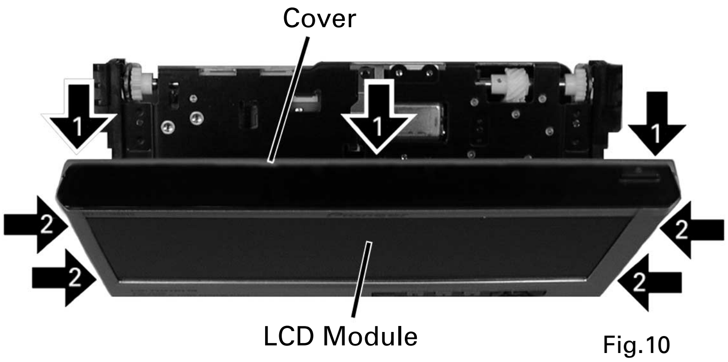

Cover
1
1
1
2
2
2
2
LCD Module

Fig.10

● Handling the mechanical module

1. The mechanical module should be handled by holding the upper frame and main frame of the mechanical module.
2. The front section of the upper frame is not very sturdy, so this section should not be held too firmly (see fig. 11).

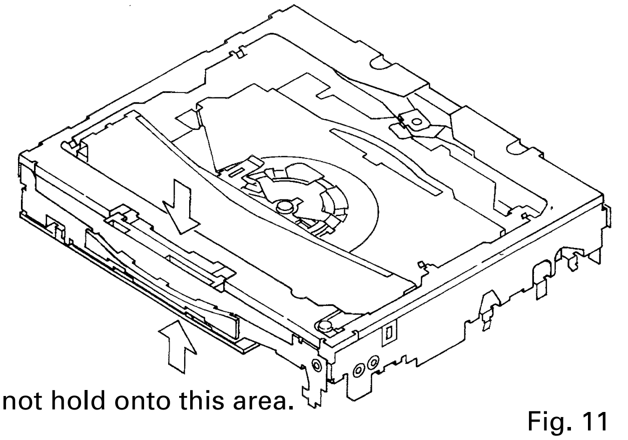


Fig. 11

● Removing the DVD CORE UNIT V

1. Bring the mechanism to a locked position (disk load standby position).
2. Turn the mechanical module upside down.
3. Set the pick-up flexible cable to a shorted position on the land end (the other is auxiliary), and turn the SW knob in the direction opposite to OP (see fig. 12).
4. Remove the pick-up flexible cable and the CRG flexible cable from the connector. Remove the solder on the lead wires of the load motor.
5. Remove a screw and two solders then remove the holder.
6. Remove screws at three locationsz, and remove the DVD Core Unit V (lift the board in the direction of the white arrow shown in fig. 13, and remove it out diagonally).

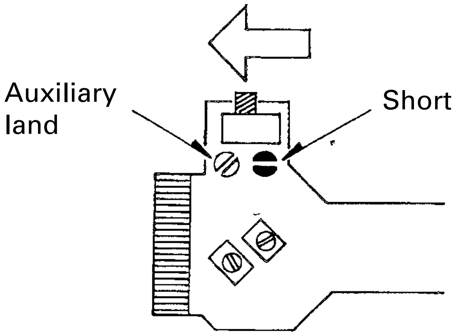


Fig. 12

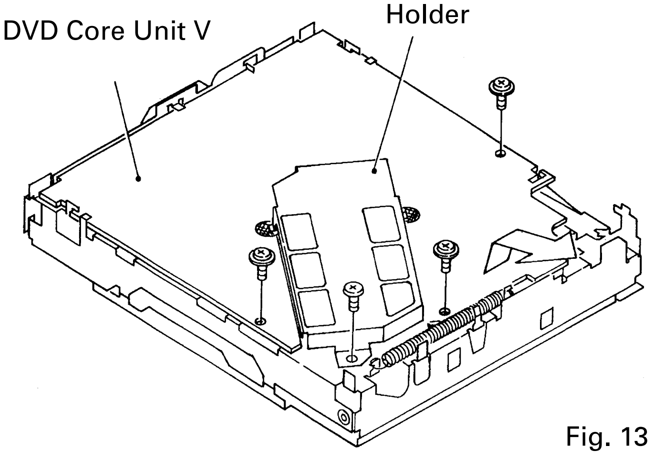


Fig. 13

● Removing the PU unit (see fig. 14)

1. Remove the DVD Core Unit V according to the "Removing the DVD Core Unit V" procedure described in the previous page.
2. Lift the pick-up rack to the center of the axis of the rack, turn it 90 degrees first, then press on it lightly, and fix it in place temporarily.
3. Remove the screw that keeps the main shaft clamp spring in place, and remove the main shaft clamp spring.
4. Remove the PU unit with the main shaft attached.

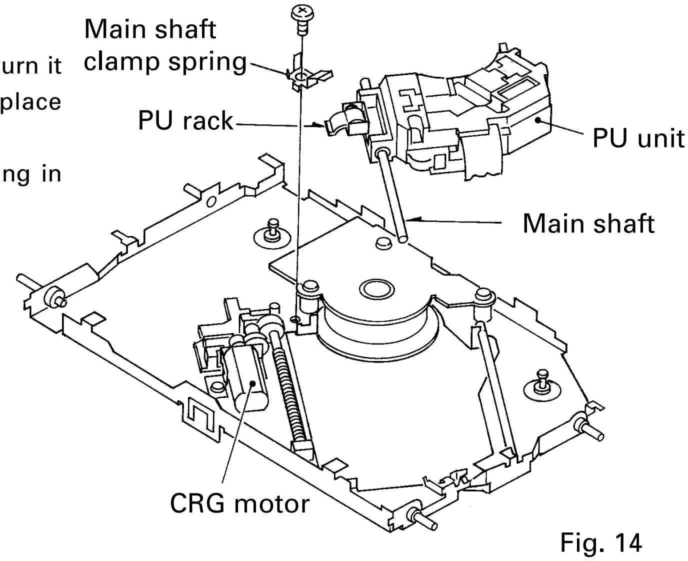
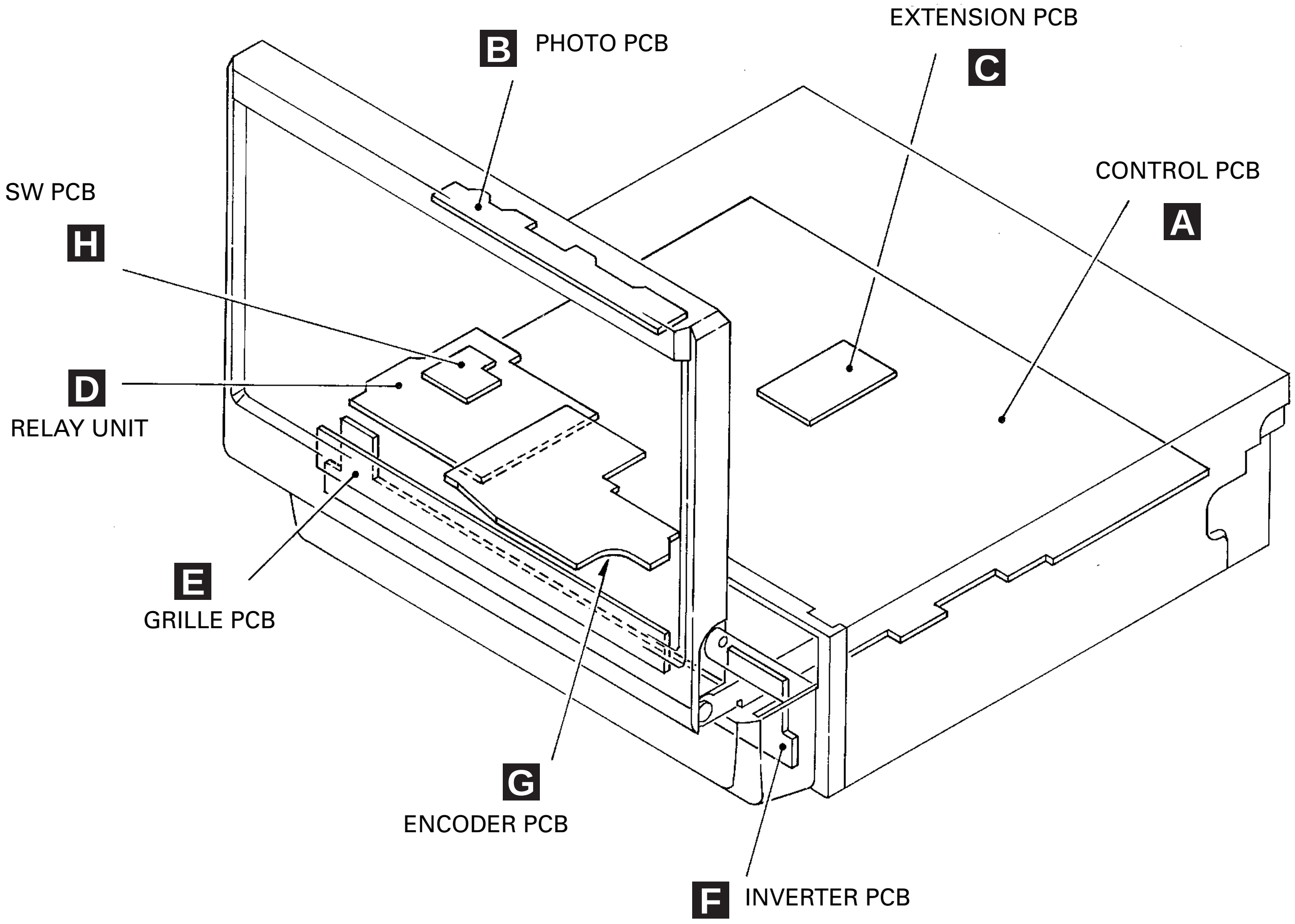
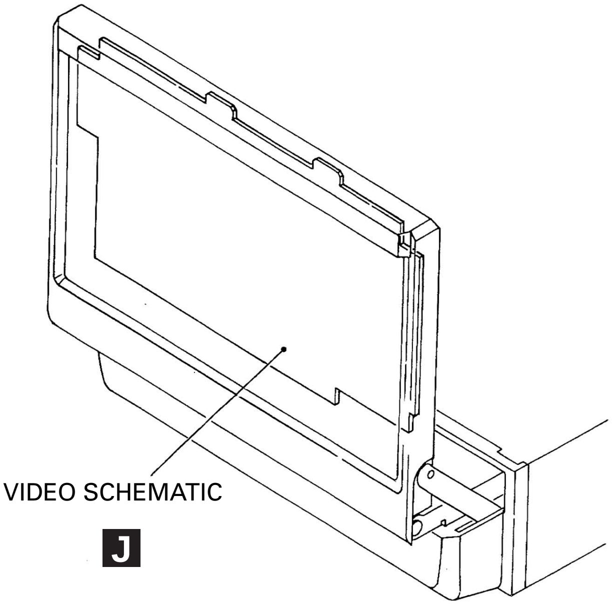
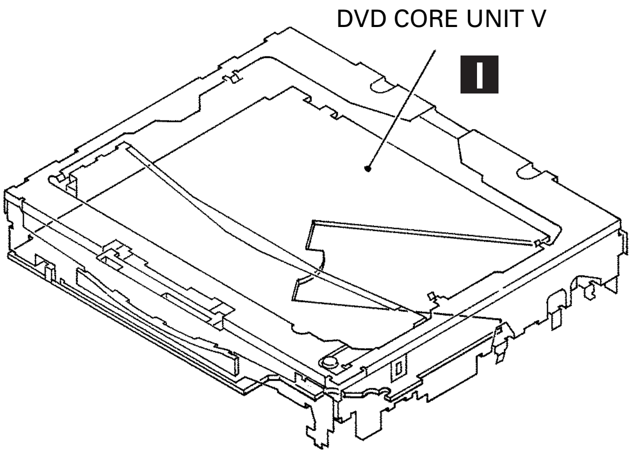


Fig. 14

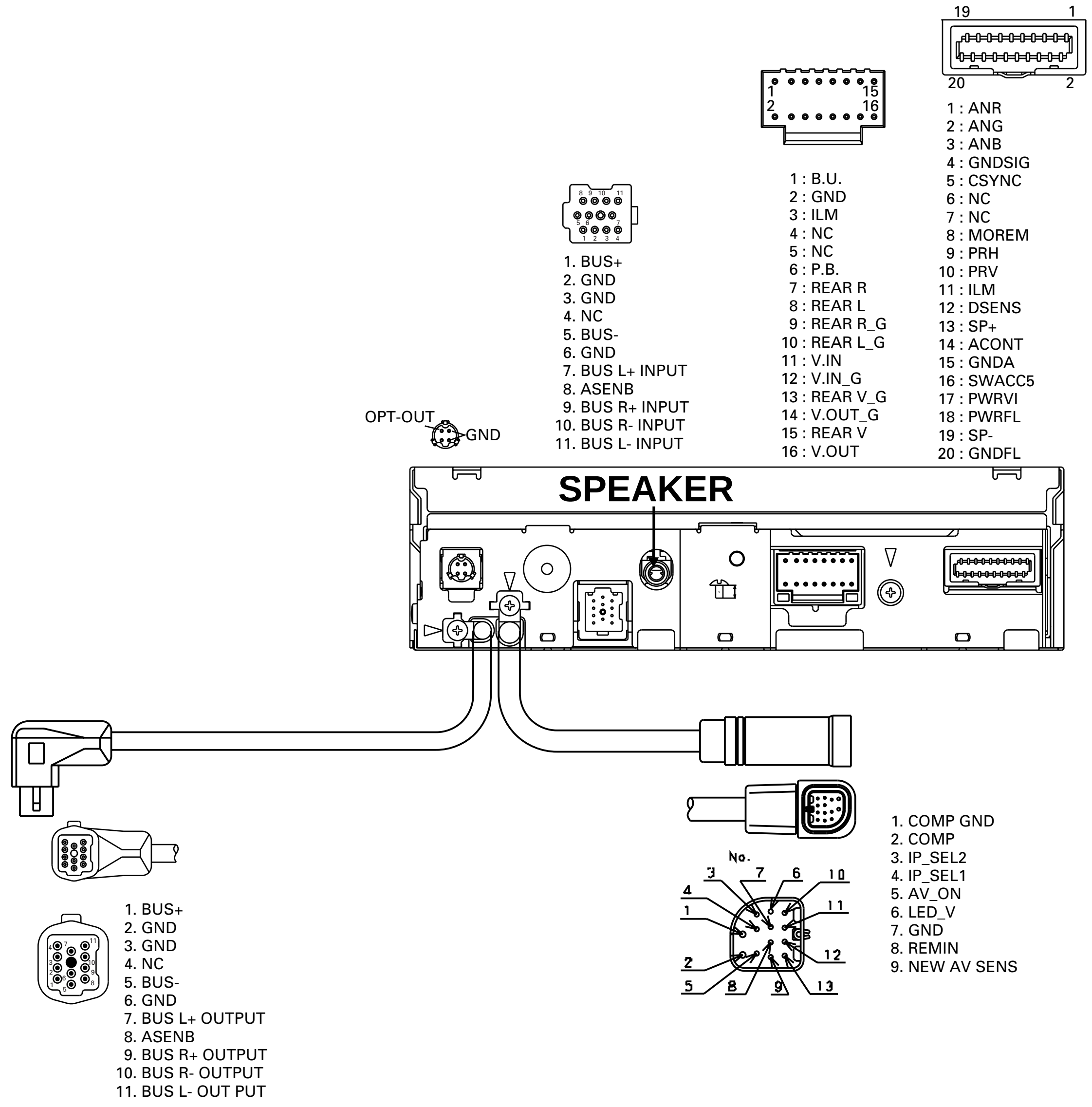
7.1.3 PCB LOCATIONS


B PHOTO PCB
EXTENSION PCB
C
CONTROL PCB
A
SW PCB
H
D
RELAY UNIT
E
GRILLE PCB
G
ENCODER PCB
F INVERTER PCB


VIDEO SCHEMATIC
J


DVD CORE UNIT V
I

7.1.4 CONNECTOR FUNCTION DESCRIPTION



1 : ANR
2 : ANG
3 : ANB
4 : GNDSIG
5 : CSYNC
6 : NC
7 : NC
8 : MOREM
9 : PRH
10 : PRV
11 : ILM
12 : DSENS
13 : SP+
14 : ACONT
15 : GNDA
16 : SWACC5
17 : PWRVI
18 : PWRFL
19 : SP-
20 : GNDFL

1 : B.U.
2 : GND
3 : ILM
4 : NC
5 : NC
6 : P.B.
7 : REAR R
8 : REAR L
9 : REAR R_G
10 : REAR L_G
11 : V.IN
12 : V.IN_G
13 : REAR V_G
14 : V.OUT_G
15 : REAR V
16 : V.OUT

1. BUS+
2. GND
3. GND
4. NC
5. BUS-
6. GND
7. BUS L+ INPUT
8. ASENB
9. BUS R+ INPUT
10. BUS R- INPUT
11. BUS L- INPUT

1. COMP GND
2. COMP
3. IP_SEL2
4. IP_SEL1
5. AV_ON
6. LED_V
7. GND
8. REMIN
9. NEW AV SENS

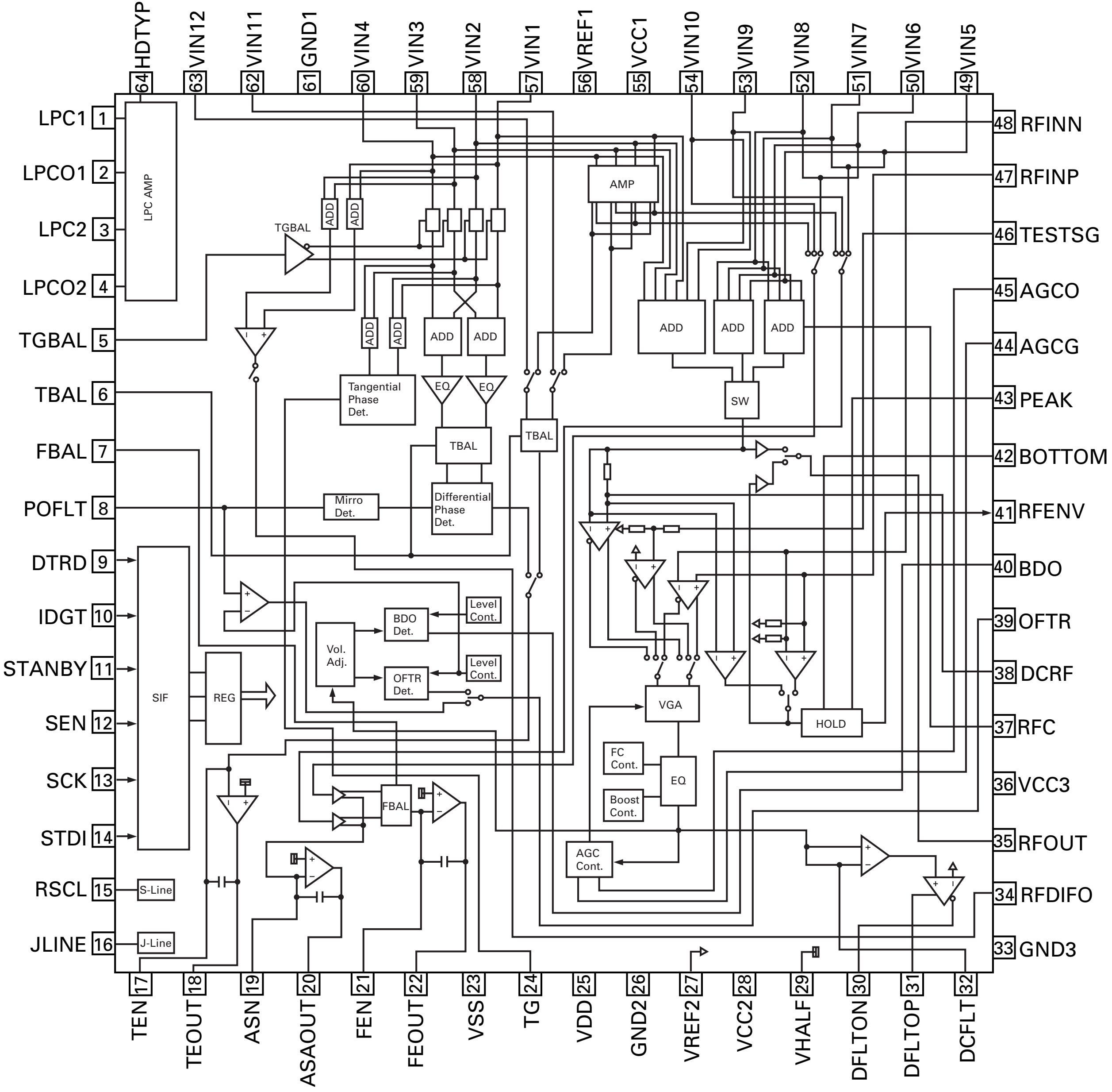
1. BUS+
2. GND
3. GND
4. NC
5. BUS-
6. GND
7. BUS L+ OUTPUT
8. ASENB
9. BUS R+ OUTPUT
10. BUS R- OUTPUT
11. BUS L- OUT PUT

7.2 IC

AN8702FH
MN677061ZYUB
MNZS25BDAUB
TC74LCX244FT
MSM56V16160F8TKFM
TC74VCX74FT
MN677532JAUB
TC74VCX04FT
SM8703AV
PD6354B
AK4380VT
TC74VCX08FT
PE5277A
BA033SFP
BA18BC0WFP
BA00BC0WFP
GP1S25
PD5582A
TC7S14FU
PE5230A
TC74VHCT08AFT
TA7806S
OZ960IS
BA6951FS
BA00ASFP
BP5250-1
PE5285A

IC's marked by * are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

*AN8702FH



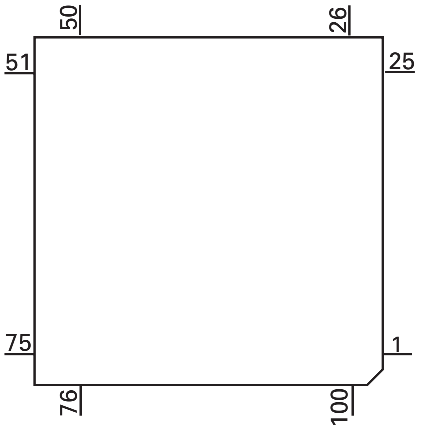
1 LPC1
2 LPCO1
3 LPC2
4 LPCO2
5 TGBAL
6 TBAL
7 FBAL
8 POFLT
9 DTRD
10 IDGT
11 STANBY
12 SEN
13 SCK
14 STDI
15 RSCL
16 JLINE
17 TEN
18 TEOUT
19 ASN
20 ASAOUT
21 FEN
22 FEOUT
23 VSS
24 TG
25 VDD
26 GND2
27 VREF2
28 VCC2
29 VHALF
30 DFLTON
31 DFLTOP
32 DCFLT
33 GND3
34 RFDIFO
35 RFOUT
36 VCC3
37 RFC
38 DCRF
39 OFTR
40 BDO
41 RFENV
42 BOTTOM
43 PEAK
44 AGCG
45 AGCO
46 TESTSG
47 RFINP
48 RFINN
49 VIN5
50 VIN6
51 VIN7
52 VIN8
53 VIN9
54 VIN10
55 VCC1
56 VREF1
57 VIN1
58 VIN2
59 VIN3
60 VIN4
61 GND1
62 VIN11
63 VIN12
64 HDTYPE
LPC AMP
TGBAL
ADD
ADD
ADD
ADD
ADD
ADD
AMP
ADD
ADD
ADD
Tangential Phase Det.
EQ
EQ
TBAL
TBAL
SW
Mirro Det.
Differential Phase Det.
SIF
REG
BDO Det.
Level Cont.
Vol. Adj.
OFTR Det.
Level Cont.
VGA
HOLD
FC Cont.
EQ
Boost Cont.
FBAL
AGC Cont.
S-Line
J-Line

● Pin Functions(MN677061ZYUB)

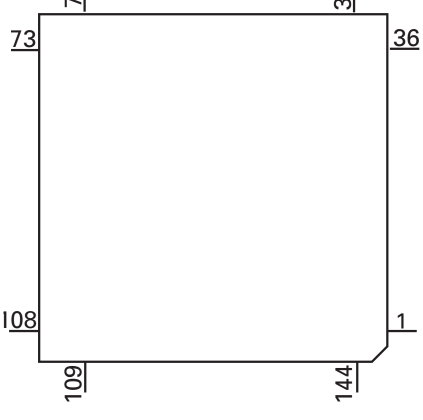
Pin No.	Pin Name	I/O	Function and Operation
1	AS	I	Full adder signal input
2	TE	I	Phase-contrast/Three beam tracking error input
3	FE	I	Focus error input
4	AVDD		Analog power supply (3.3V)
5	FODRV	O	Focus driver output
6	TRDRV	O	Tracking driver output
7	AVSS1		Analog GND
8	ARF	I	Equivalent RF+ input
9	$\overline{\text{ARF}}$	I	Equivalent RF- input
10,11	IREF1,2	I	DBAL reference current input 1,2
12,13	DSLF1,2	I/O	DSL capacitor input/output 1,2
14	AVDD2		Analog power supply (3.3V)
15	VHALF		Reference voltage (1.65±0.1V)
16,17	NC		Not used
18	VREFH		Reference voltage (2.2±0.1V)
19	RVI	I/O	VERFH reference current resistor input/output
20	AVSS2		Analog GND
21,22	PLFLT1,2	O	PLL capacitor output 1,2
23	JITOUT	I/O	Jitter signal monitor input/output
24	N.C.1	I	Open
25	N.C.2	I/O	Pull up
26	NC		Not used
27	AVDD3		Analog power supply (3.3V)
28	N.C.3	I	Pull up
29	N.C.4		Not used
30	AVSS3		Analog GND
31	N.C.5		Pull up
32	N.C.6		Not used
33	N.C.7		Open
34	TRCRS	I	Track cross production signal input
35	VCOF	I/O	JFVCO control voltage input/output
36	DBALO	O	DSL balance adjustment output
37	JLIN	O	J-line set output
38	AVDD4		Analog power supply (3.3V)
39	LOUT	O	Analog audio left output
40	ROUT	O	Analog audio right output
41	AVSS4	I	Analog GND
42	GBAL	O	Tangential balance adjustment output
43	TBAL	O	Tracking balance adjustment output
44	FBAL	O	Focus balance adjustment output
45	VSS331		I/O GND
46	VDD331		I/O power supply (3.3V)
47	OFTR	I	Off track signal input
48	SYSCLK	I	System clock input
49	BDO	I	RF dropout signal input
50	TSTSG	O	Calibration signal output
51	TRSDRV	O	Traverse driver output
52	SPDRV	O	Spindle driver output
53	FG	I	FG signal input
54	N.C.8		Not used
55	CRGDRV	O	Carriage driver output
56	N.C.10		Not used
57	VSS251		GND
58	VDD251		Power supply
59	DTRD	I	Data read control signal output
60	LDGT	I	GND
61	LRCK	O	LR channel data strobe output
62	SBBCLK	O	CD sub code synchronism signal output

Pin No.	Pin Name	I/O	Function and Operation
63	PLLOK	I	PLL drag OK signal input
64	IDHOLD		GND
65	DACLRCK	I	1bit DAC - LR channel data strobe input
66	DACDATA	I	CD 1bit DAC channel data input
67	$\overline{\text{TRON}}$	O	Tracking ON output
68	DACCLK	O	1bit DAC channel data shift clock input
69	IPFLG	O	CIRG error flag output
70	SUBC	O	CD sub code output
71	$\overline{\text{CLDCK}}$	O	CD sub code data frame clock output
72	MINTEST	I	GND
73	TEST	I	GND
74	VSS332		I/O GND
75	VDD332		I/O power supply (3.3V)
76	CHCK40	O	SRDATA clock output
77–80	DAT3–0	O	SRDATA output 3–0
81	VSS333		I/O GND
82	VDD333		I/O power supply (3.3V)
83	TX	O	Digital audio interface data output
84	XRESET	I	Reset input
85	ENS	I	Servo DSC serial I/F chip select input
86	ENC	I	CIRC serial I/F chip select input
87	CPUIRQ	O	Interrupt request output to system computer
88	CPUCLK	I	System computer serial I/F clock input
89	CPUDTIN	I	System computer serial I/F data input
90	CPUDTOUT	O	System computer serial I/F data output
91,92	MONA,B	O	Monitor terminal output A,B
93	CDPLLOK	O	CD PLL drag OK signal output
94	N.C.12		Not used
95	VSS252		GND
96	VDD252		Power supply
97,98	N.C.		Pull up
99	TG	I	Tangential phase-contrast input
100	REFNV	I	RF envelop input

*MN677061ZYUB



*MNZS25BDAUB

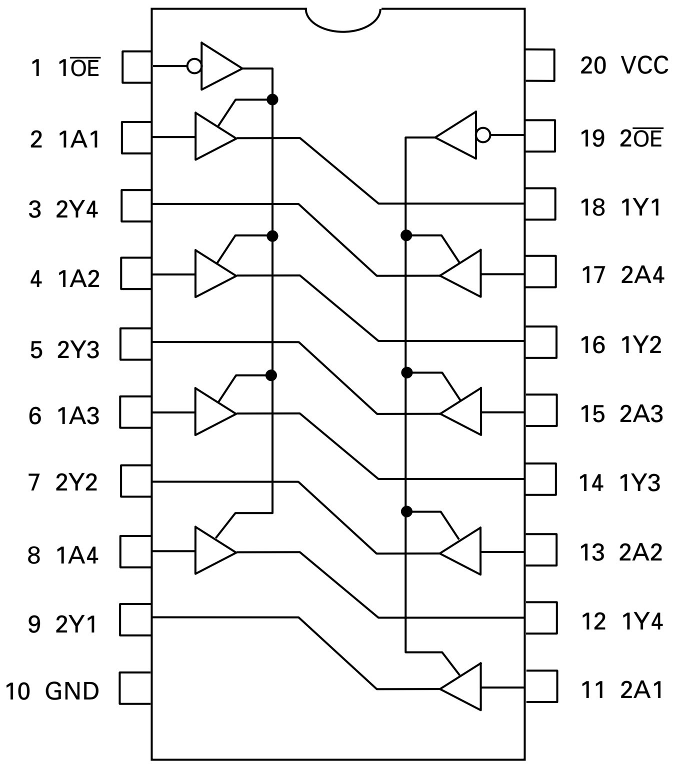


● Pin Functions(MNZS25BDAUB)

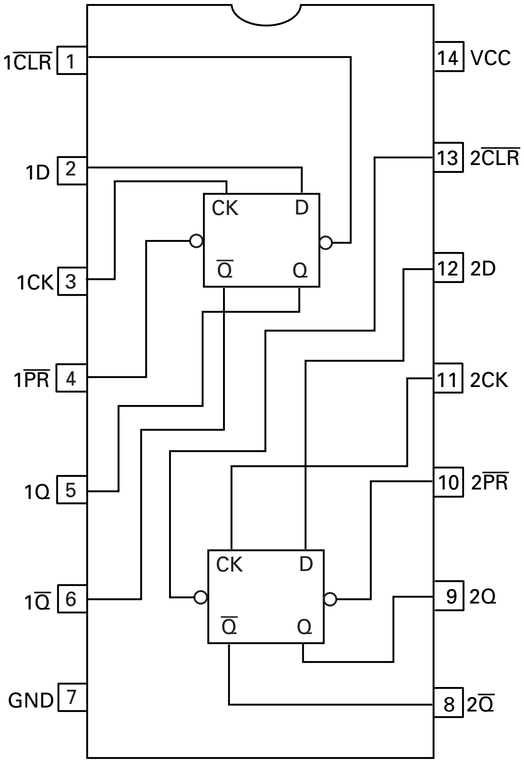
Pin No.	Pin Name	I/O	Function and Operation
1	HDD15	I/O	ATAPI HOST data input/output 15
2	HDD0	I/O	ATAPI HOST data input/output 0
3	HDD14	I/O	ATAPI HOST data input/output 14
4	VDD31		I/O power supply (3.3V)
5	HDD1	I/O	ATAPI HOST data input/output 1
6	HDD13	I/O	ATAPI HOST data input/output 13
7	HDD2	I/O	ATAPI HOST data input/output 2
8	VSS1		GND
9	HDD12	I/O	ATAPI HOST data input/output 12
10	VDD21		Digital power supply (2.7V)
11	HDD3	I/O	ATAPI HOST data input/output 3
12	HDD11	I/O	ATAPI HOST data input/output 11
13	HDD4	I/O	ATAPI HOST data input/output 4
14	HDD10	I/O	ATAPI HOST data input/output 10
15	VDD32		I/O power supply (3.3V)
16	HDD5	I/O	ATAPI HOST data input/output 5
17	HDD9	I/O	ATAPI HOST data input/output 9
18	VSS2		GND
19	HDD6	I/O	ATAPI HOST data input/output 6
20	HDD8	I/O	ATAPI HOST data input/output 8
21	HDD7	I/O	ATAPI HOST data input/output 7
22	VDDH		ATAPI reference power supply (5.0V)
23	$\overline{\text{RESET}}$		Reset input
24	MASTER	I/O	ATAPI master/slave select input/output
25	$\overline{\text{INT0}}$	O	System computer interrupt output 0
26	$\overline{\text{INT1}}$	O	System computer interrupt output 1
27	WAITODC	O	System computer bus wait control output
28	$\overline{\text{MRST}}$	O	System computer reset output
29	DASPST	I	DASP initialize value input
30	VDD33		I/O power supply (3.3V)
31	NC		Not used
32	P2	O	PORT output
33	UATASEL	I	Internal clock select input
34	VSS3		GND
35	PVSSDRAM1		GND
36	PVDDDRAM1		Digital power supply (2.7V)
37,38	CPUADR17,16	I	System computer address input 17,16
39	PVSSDRAM2		GND
40–43	CPUADR15-12	I	System computer address input 15-12
44	PVDDDRAM2		Digital power supply (2.7V)
45–55	CPUADR11-1	I	System computer address input11-1
56	VSS4		GND
57	CPUADR0	I	System computer address input 0
58	$\overline{\text{CS}}$	I	System computer chip select input
59	$\overline{\text{WR}}$	I	System computer write signal input
60	$\overline{\text{RD}}$	I	System computer read signal input
61	VDD34		I/O power supply (3.3V)
62,63	CPUDT7,6	I/O	System computer data input/output 7,6
64,65	PTESTDRAM0,1		GND
66	VDD22		Digital power supply (2.7V)
67	VSS5		GND
68–70	CPUDT5-3	I/O	System computer data input/output 5-3
71	VSS6		GND
72–74	CPUDT2-0	I/O	System computer data input/output 2-0
75	CLKOUT1	O	System computer clock output 1
76	VDD35		I/O power supply (3.3V)
77	NC		Not used
78	DTRD	O	CAPA read gate output
79	NC		Not used

Pin No.	Pin Name	I/O	Function and Operation
80	BDO	I	RF dropout signal input
81	LRCK	I	LR identifier signal input
82	SBBCLK	I	CD sub code block clock input
83	VSS7		GND
84	MMOD		GND
85	$\overline{RST}$	I	System reset input
86	VDD23		Digital power supply (2.7V)
87	CLKOUT2	O	System computer clock output 2
88	PLLOK	O	Frame mark detect signal output
89	NC		Not used
90	DACLRCK	O	LR identifier signal output
91	DACDATA	O	Serial output
92	$\overline{TRON}$	I	Tracking ON input
93,94	NC		Not used
95	DACCLK	I	1bit DAC Serial output clock input
96	IPFLG	I	interpolation flag input
97	TX	I	TX input
98	LRCK	I	VSS
99	VSS8		GND
100	OSCI1	I	Oscillator pin input
101	OSCO1	O	Oscillator pin output
102	VDD36		I/O power supply (3.3V)
103	PVSS		GND
104	PVDD		I/O power supply (3.3V)
105	P1		VDD3
106	P0		VDD3
107	VSS9		GND
108	NC		Not used
109	SUBC	I	Sub code serial input
110	XCLDCK	I	Sub code Frame clock input
111	CHCK4	I	Read clock input to DAT3-0
112–115	DAT3-0	I	Read data input from DISC 3-0
116	VDD37		I/O power supply (3.3V)
117	SCLOCK	I/O	Pull up
118	SDATA	I/O	Pull up
119–122	MONI3-0	O	Internal signal monitor output 3-0
123	VSS10		GND
124	$\overline{EJECT}$	I	Eject detect input
125	VDD24		Digital power supply (2.7V)
126	$\overline{TRYCL}$	I	Tray close detect input
127	$\overline{DASP}$	I/O	ATAPI drive active/slave connect input/output
128	$\overline{CS3FX}$	I	ATAPI HOST chip select input
129	$\overline{CS1FX}$	I	ATAPI HOST chip select input
130	VDD38		I/O power supply (3.3V)
131	DA2	I/O	ATAPI HOST address input/output 2
132	DA0	I/O	ATAPI HOST address input/output 0
133	$\overline{PDIAG}$	I/O	ATAPI slave/master diagnosis input/output
134	VSS11		GND
135	DA1	I/O	ATAPI HOST address input/output 1
136	$\overline{IOCS16}$	O	ATAPI HOST data bus width select output
137	INTRQ	O	ATAPI HOST interrupt request output
138	VDD39		I/O power supply (3.3V)
139	$\overline{DMACK}$	I	ATAPI HOST DMA response input
140	IORDY	O	ATAPI HOST ready output
141	$\overline{IORD}$	I/O	ATAPI HOST data read input/output
142	VSS12		GND
143	$\overline{IOWR}$	I/O	ATAPI HOST data write input/output
144	DMARQ	O	ATAPI HOST DMA request output

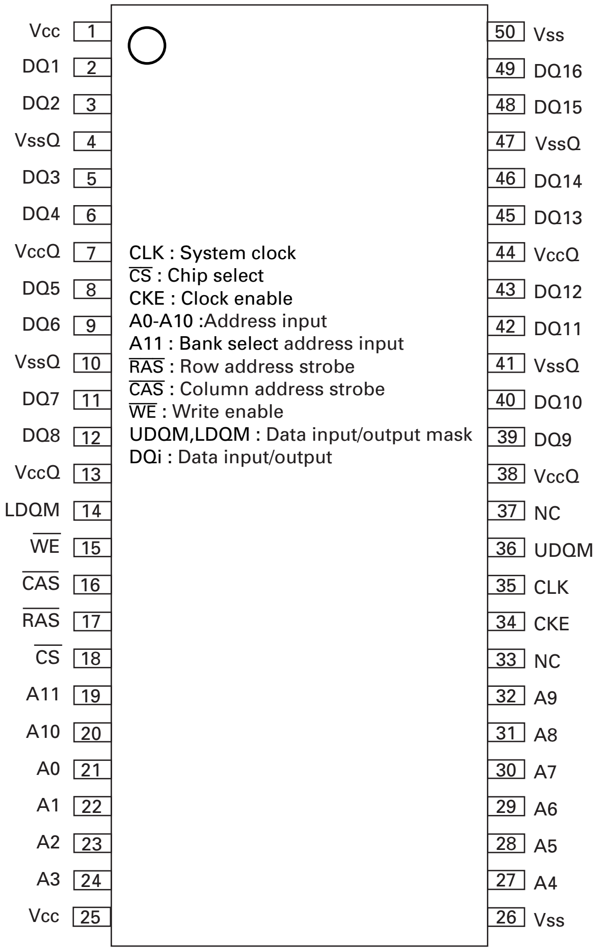
*TC74LCX244FT


1 1OE
2 1A1
3 2Y4
4 1A2
5 2Y3
6 1A3
7 2Y2
8 1A4
9 2Y1
10 GND
20 VCC
19 2OE
18 1Y1
17 2A4
16 1Y2
15 2A3
14 1Y3
13 2A2
12 1Y4
11 2A1

*TC74VCX74FT


1CLR 1
1D 2
1CK 3
1PR 4
1Q 5
1Q 6
GND 7
14 VCC
13 2CLR
12 2D
11 2CK
10 2PR
9 2Q
8 2Q
CK
D
Q
Q
CK
D
Q
Q

*MSM56V16160F8TKFM


Vcc 1
DQ1 2
DQ2 3
VssQ 4
DQ3 5
DQ4 6
VccQ 7
DQ5 8
DQ6 9
VssQ 10
DQ7 11
DQ8 12
VccQ 13
LDQM 14
WE 15
CAS 16
RAS 17
CS 18
A11 19
A10 20
A0 21
A1 22
A2 23
A3 24
Vcc 25
50 Vss
49 DQ16
48 DQ15
47 VssQ
46 DQ14
45 DQ13
44 VccQ
43 DQ12
42 DQ11
41 VssQ
40 DQ10
39 DQ9
38 VccQ
37 NC
36 UDQM
35 CLK
34 CKE
33 NC
32 A9
31 A8
30 A7
29 A6
28 A5
27 A4
26 Vss

CLK : System clock
$\overline{\text{CS}}$: Chip select
CKE : Clock enable
A0-A10 :Address input
A11 : Bank select address input
$\overline{\text{RAS}}$: Row address strobe
$\overline{\text{CAS}}$: Column address strobe
$\overline{\text{WE}}$: Write enable
UDQM,LDQM : Data input/output mask
DQi : Data input/output

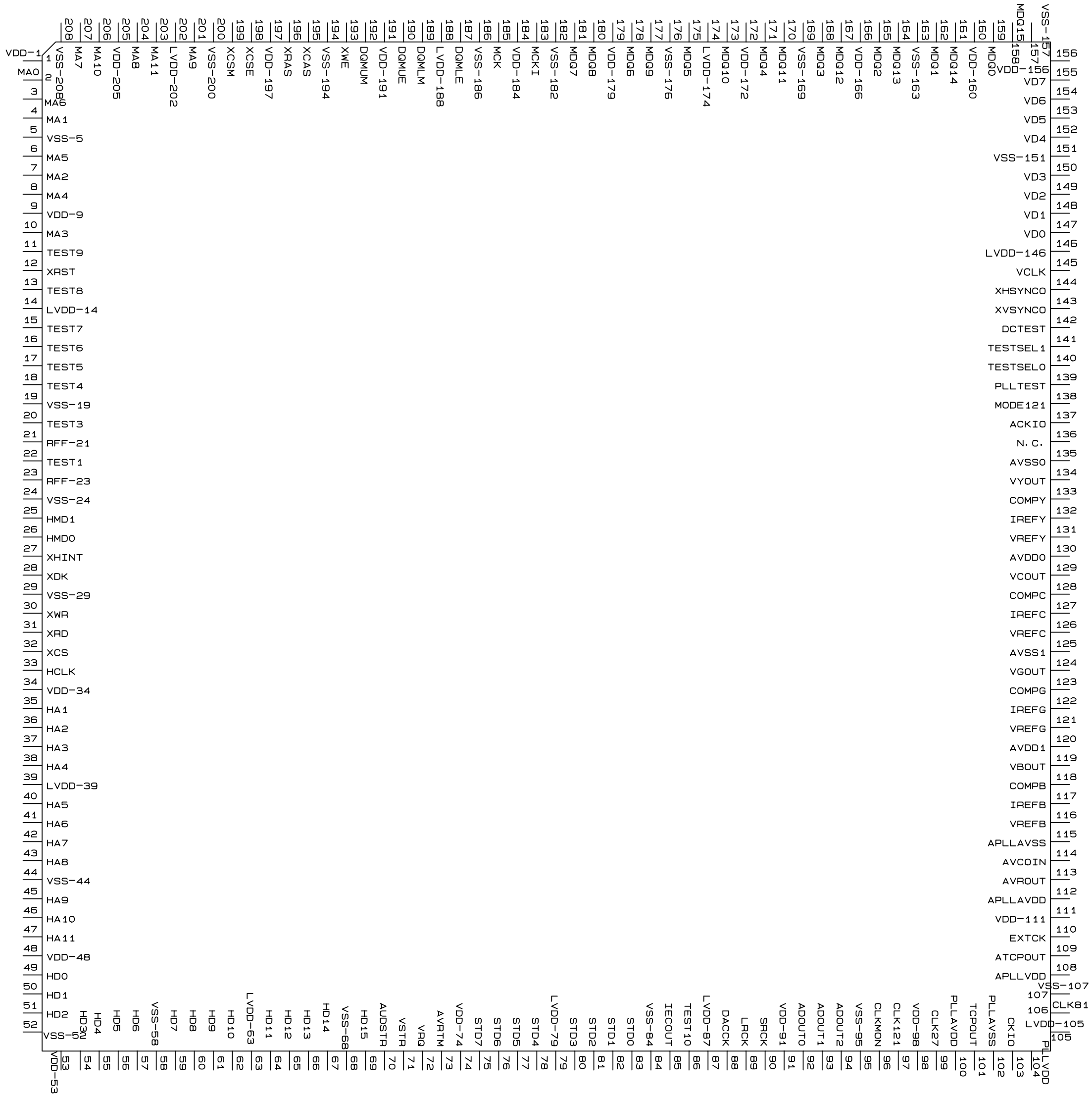
● Pin Functions(MN677532JAUB)

Pin No.	Pin Name	I/O	Function and Operation
1	VDD-1		Power supply
2	MA0	O	Bank sell and address
3	MA6	O	Bank sell and address
4	MA1	O	Bank sell and address
5	VSS-5		GND
6	MA5	O	Bank sell and address
7	MA2	O	Bank sell and address
8	MA4	O	Bank sell and address
9	VDD-9		Power supply
10	MA3	O	Bank sell and address
11	TEST9	O	Test signal
12	XRST	I	System reset
13	TEST8	O	Test signal
14	LVDD-14	O	Lch Power supply
15-18	TEST7-4	O	Test signal
19	VSS-19		GND
20	TEST3	O	Test signal
21	RFF-21	O	Repeat first field flag output
22	TEST1	O	Test signal
23	RFF-23	O	Repeat first field flag output
24	VSS-24	O	GND
25,26	HMD1,0	I	Host CPU select
27	XHINT	O	Interrupt strobe
28	XDK	O	Data acknowledge
29	VSS-29		GND
30	XWR	I	Write enable
31	XRD	I	Read enable
32	XCS	I	Chip select
33	HCLK	I	Host CPU clock
34	VDD-34		Power supply
35-38	HA1-4	I	Address bus
39	LVDD-39		Lch Power supply
40-43	HA5-8	I	Address bus
44	VSS-44		GND
45-47	HA9-11	I	Address bus
48	VDD-48	I	Power supply
49-51	HD0-2	I/O	Data bus
52	VSS-52		GND
53	VDD-53	I	Power supply
54-57	HD3-6	I/O	Data bus
58	VSS-58		GND
59-62	HD7-10	I/O	Data bus
63	LVDD-63		Lch Power supply
64-67	HD11-14	I/O	Data bus
68	VSS-68		GND
69	HD15	I/O	Data bus
70	AUDSTR	I	Data strobe
71	VSTR	I	Data strobe
72	VRQ	O	DMA request
73	AVRTM	I	Select separation signal
74	VDD-74		Power supply
75-78	STD7-4	I	Stream data/CD-Audio bypass port
79	LVDD-79		Lch Power supply
80-83	STD3-0	I	Stream data/CD-Audio bypass port
84	VSS-84		GND
85	IECOUT	O	IEC958 data output
86	TEST10	O	Test signal
87	LVDD-87		Lch Power supply

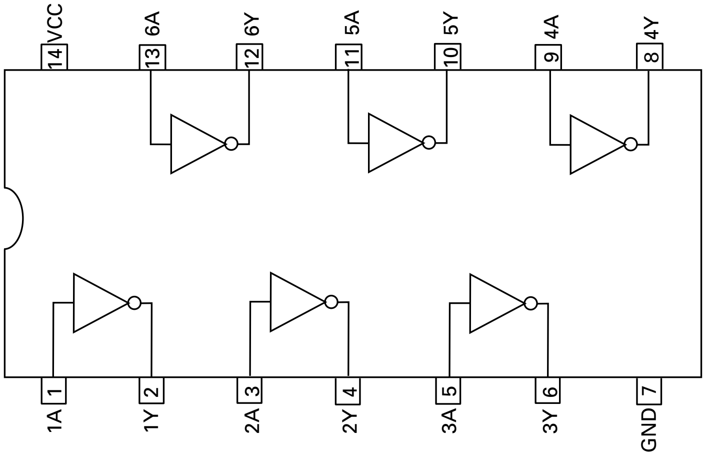
Pin No.	Pin Name	I/O	Function and Operation
88	DACCK	O	DAC clock output
89	LRCK	O	LR clock output
90	SRCK	O	Bit clock output
91	VDD-91		Power supply
92-94	ADOUT0-2	O	Audio data output
95	VSS-95		GND
96	CLKMON	O	Clock monitor
97	CLK121	I	121.5MHz clock input
98	VDD-98	O	Power supply
99	CLK27	I	27MHz clock input
100	PLLAVDD		PLL analog power supply
101	TCPOUT	O	OPEN
102	PLLAVSS	O	OPEN
103	CKIO	I	81MHz clock select
104	PLLVDD		PLL
105	LVDD-105		Lch power supply
106	CLK81	I	81MHz clock input
107	VSS-107	I	GND
108	APLLVDD		Analog PLL power supply
109	ATCPOUT	O	OPEN
110	EXTCK	I	Outside clock output
111	VDD-111		Power supply
112	APLLAVDD		Analog PLL audio power supply
113	AVROUT		OPEN
114	AVCOIN		GND
115	APLLAVSS		Analog PLL audio GND
116	VREFB	I	DAC reference input
117	IREFB	I	DAC resistance terminal for bias current setting
118	COMPB	I	DAC capacity connection terminal for stabilization
119	VBOUT	O	C analog output
120	AVDD1		Analog power supply
121	VREFG	I	DAC reference input
122	IREFG	I	DAC resistance terminal for bias current setting
123	COMPG	I	DAC capacity connection terminal for stabilization
124	VGOUT	O	Cb composite analog output
125	AVSS1		Analog GND
126	VREFC	I	DAC reference input
127	IREFC	I	DAC resistance terminal for bias current setting
128	COMPC	I	DAC capacity connection terminal for stabilization
129	VCOUT	O	Cr C analog output
130	AVDD0		Analog power supply
131	VREFY	I	DAC reference input
132	IREFY	I	DAC resistance terminal for bias current setting
133	COMPY	I	DAC capacity connection terminal for stabilization
134	VYOUT	O	Y analog output
135	AVSS0		Analog GND
136	N.C.		Not used
137	ACKIO	I	Audio PLL test mode
138	MODE121	I	Clock mode select
139	PLLTEST		PLL test
140,141	TESTSEL0,1	O	Test signal
142	DCTEST	I	DC test mode
143	XVSYNCO	I/O	Vertical sync input/output
144	XHSYNCO	I/O	Horizontal sync input/output
145	VCLK	O	Video data clock
146	LVDD-146		Lch power supply
147-150	VD0-3	O	Video data bus
151	VSS-151		GND
152-155	VD4-7	O	Video data bus

Pin No.	Pin Name	I/O	Function and Operation
156	VDD-156		Power supply
157	VSS-157		GND
158	MDQ15	I/O	I/O data SDRAM
159	MDQ0	I/O	I/O data SDRAM
160	VDD-160		Power supply
161	MDQ14	I/O	I/O data SDRAM
162	MDQ1	I/O	I/O data SDRAM
163	VSS-163		GND
164	MDQ13	I/O	I/O data SDRAM
165	MDQ2	I/O	I/O data SDRAM
166	VDD-166		Power supply
167	MDQ12	I/O	I/O data SDRAM
168	MDQ3	I/O	I/O data SDRAM
169	VSS-169		GND
170	MDQ11	I/O	I/O data SDRAM
171	MDQ4	I/O	I/O data SDRAM
172	VDD-172		Power supply
173	MDQ10	I/O	I/O data SDRAM
174	LVDD-174		Lch power supply
175	MDQ5	I/O	I/O data SDRAM
176	VSS-176		GND
177	MDQ9	I/O	I/O data SDRAM
178	MDQ6	I/O	I/O data SDRAM
179	VDD-179		Power supply
180	MDQ8	I/O	I/O data SDRAM
181	MDQ7	I/O	I/O data SDRAM
182	VSS-182		GND
183	MCKI	I	SDRAM CLK input
184	VDD-184		Power supply
185	MCK	I	SDRAM CLK
186	VSS-186		GND
187	DQMLE	O	Lower byte DQ mask of extended SDRAM
188	LVDD-188		Lch power supply
189	DQMLM	O	Lower byte DQ mask of main SDRAM
190	DQMUE	O	Upper byte DQ mask of extended SDRAM
191	VDD-191		Power supply
192	DQMUM	O	Upper byte DQ mask of main SDRAM
193	XWE	O	Write signal of SDRAM
194	VSS-194		GND
195	XCAS	O	CAS of SDRAM
196	XRAS	O	RAS of SDRAM
197	VDD-197		Power supply
198	XCSE	O	CS of extended SDRAM
199	XCSM	O	CS of main SDRAM
200	VSS-200		GND
201	MA9	O	Bank sell and address
202	LVDD-202		Lch power supply
203	MA11	O	Bank sell and address
204	MA8	O	Bank sell and address
205	VDD-205		Power supply
206	MA10	O	Bank sell and address
207	MA7	O	Bank sell and address
208	VSS-208		GND

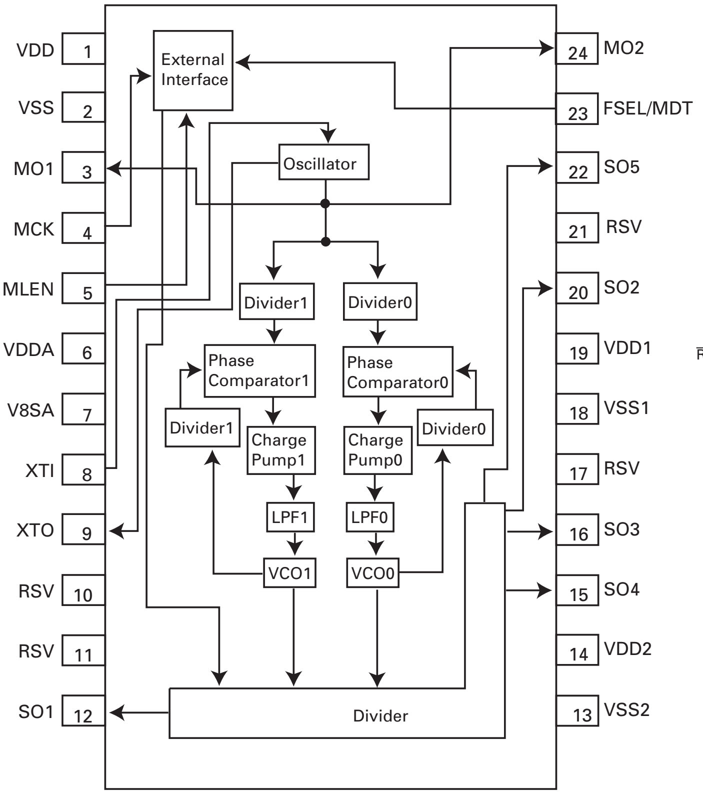
*MN677532JAUB


1 VDD-1
2 MA0
3 MA6
4 MA1
5 VSS-5
6 MA5
7 MA2
8 MA4
9 VDD-9
10 MA3
11 TEST9
12 XRST
13 TEST8
14 LVDD-14
15 TEST7
16 TEST6
17 TEST5
18 TEST4
19 VSS-19
20 TEST3
21 RFF-21
22 TEST1
23 RFF-23
24 VSS-24
25 HMD1
26 HMD0
27 XHINT
28 XDK
29 VSS-29
30 XWR
31 XRD
32 XCS
33 HCLK
34 VDD-34
35 HA1
36 HA2
37 HA3
38 HA4
39 LVDD-39
40 HA5
41 HA6
42 HA7
43 HA8
44 VSS-44
45 HA9
46 HA10
47 HA11
48 VDD-48
49 HD0
50 HD1
51 HD2
52 VSS-52
53 VDD-53
54 HD3
55 HD4
56 HD5
57 HD6
58 VSS-58
59 HD7
60 HD8
61 HD9
62 HD10
63 LVDD-63
64 HD11
65 HD12
66 HD13
67 HD14
68 VSS-68
69 HD15
70 AUDSTR
71 VSTR
72 VRQ
73 AVRTM
74 VDD-74
75 STD7
76 STD6
77 STD5
78 STD4
79 LVDD-79
80 STD3
81 STD2
82 STD1
83 STD0
84 VSS-84
85 IECOUT
86 TEST10
87 LVDD-87
88 DACCK
89 LRCK
90 SRCK
91 VDD-91
92 ADOUT0
93 ADOUT1
94 ADOUT2
95 VSS-95
96 CLKMON
97 CLK121
98 VDD-98
99 CLK27
100 PLLAVDD
101 TCPOUT
102 PLLAVSS
103 CKIO
104 PLLVDD
105 LVDD-105
106 CLK81
107 VSS-107
108 APLLVDD
109 ATCPOUT
110 EXTCK
111 VDD-111
112 APLLAVDD
113 AVROUT
114 AVCOIN
115 APLLAVSS
116 VREFB
117 IREFB
118 COMPB
119 VBOUT
120 AVDD1
121 VREFG
122 IREFG
123 COMPG
124 VGOUT
125 AVSS1
126 VREFC
127 IREFC
128 COMPC
129 VCOUT
130 AVDD0
131 VREFY
132 IREFY
133 COMPY
134 VYOUT
135 AVSS0
136 N.C.
137 ACKIO
138 MODE121
139 PLLTEST
140 TESTSEL0
141 TESTSEL1
142 DCTEST
143 XVSYNCO
144 XHSYNCO
145 VCLK
146 LVDD-146
147 VD0
148 VD1
149 VD2
150 VD3
151 VSS-151
152 VD4
153 VD5
154 VD6
155 VD7
156 VDD-156
157 VSS-157
158 MDQ15
159 MDQ0
160 VDD-160
161 MDQ14
162 MDQ1
163 VSS-163
164 MDQ13
165 MDQ2
166 VDD-166
167 MDQ12
168 MDQ3
169 VSS-169
170 MDQ11
171 MDQ4
172 VDD-172
173 MDQ10
174 LVDD-174
175 MDQ5
176 VSS-176
177 MDQ9
178 MDQ6
179 VDD-179
180 MDQ8
181 MDQ7
182 VSS-182
183 MCKI
184 VDD-184
185 MCK
186 VSS-186
187 DQMLE
188 LVDD-188
189 DQMLM
190 DQMUE
191 VDD-191
192 DQMUM
193 XWE
194 VSS-194
195 XCAS
196 XRAS
197 VDD-197
198 XCSE
199 XCSM
200 VSS-200
201 MA9
202 LVDD-202
203 MA11
204 MA8
205 VDD-205
206 MA10
207 MA7
208 VSS-208

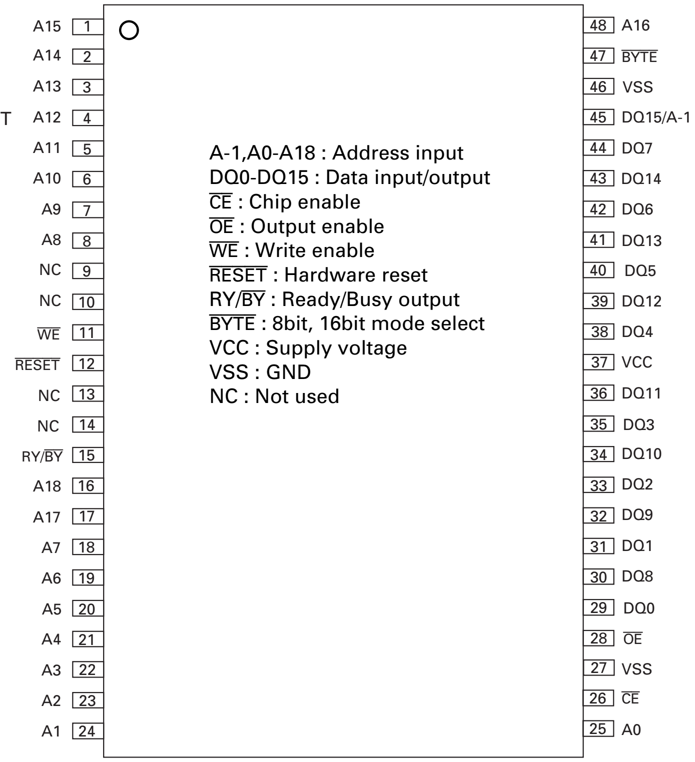
*TC74VCX04FT


14 VCC
13 6A
12 6Y
11 5A
10 5Y
9 4A
8 4Y
1 1A
2 1Y
3 2A
4 2Y
5 3A
6 3Y
7 GND

*SM8703AV

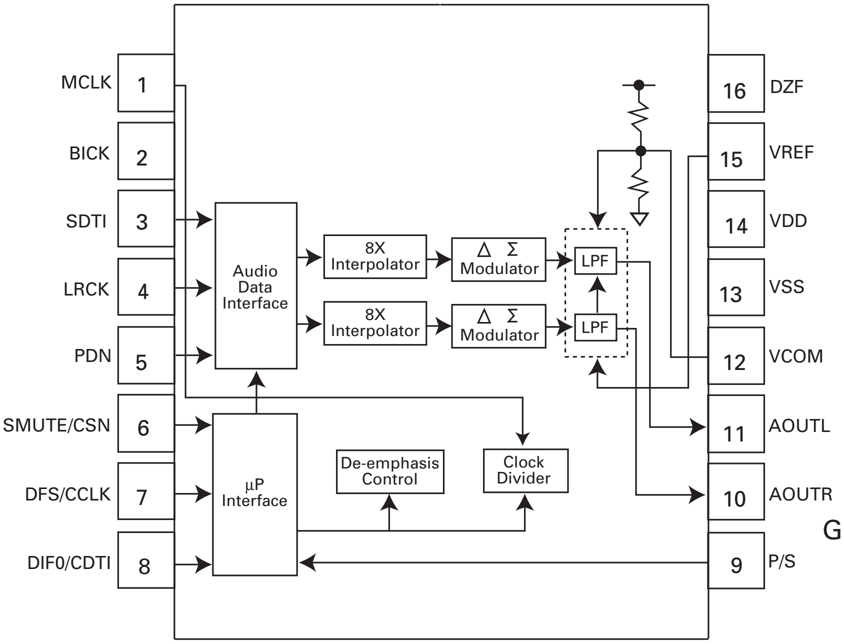

VDD 1
VSS 2
MO1 3
MCK 4
MLEN 5
VDDA 6
V8SA 7
XTI 8
XTO 9
RSV 10
RSV 11
SO1 12
VSS2 13
VDD2 14
SO4 15
SO3 16
RSV 17
VSS1 18
VDD1 19
SO2 20
RSV 21
SO5 22
FSEL/MDT 23
MO2 24
External Interface
Oscillator
Divider1
Divider0
Phase Comparator1
Phase Comparator0
Divider1
Charge Pump1
Charge Pump0
Divider0
LPF1
LPF0
VCO1
VCO0
Divider

*PD6354B

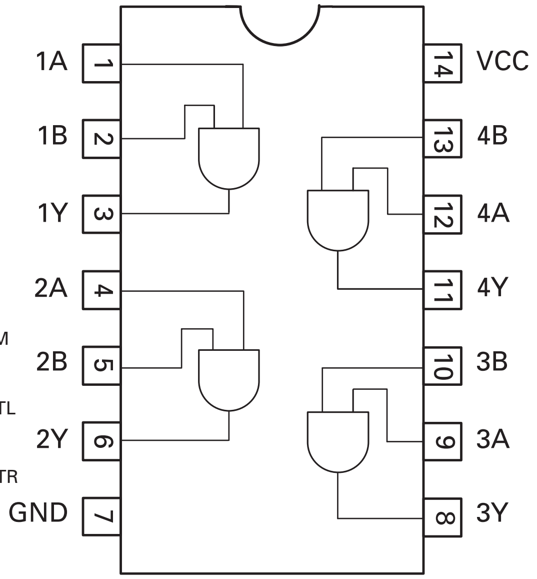

A15 1
A14 2
A13 3
A12 4
A11 5
A10 6
A9 7
A8 8
NC 9
NC 10
WE 11
RESET 12
NC 13
NC 14
RY/BY 15
A18 16
A17 17
A7 18
A6 19
A5 20
A4 21
A3 22
A2 23
A1 24
A0 25
CE 26
VSS 27
OE 28
DQ0 29
DQ8 30
DQ1 31
DQ9 32
DQ2 33
DQ10 34
DQ3 35
DQ11 36
VCC 37
DQ4 38
DQ12 39
DQ5 40
DQ13 41
DQ6 42
DQ14 43
DQ7 44
DQ15/A-1 45
VSS 46
BYTE 47
A16 48

A-1,A0-A18 : Address input
DQ0-DQ15 : Data input/output
$\overline{\text{CE}}$: Chip enable
$\overline{\text{OE}}$: Output enable
$\overline{\text{WE}}$: Write enable
$\overline{\text{RESET}}$: Hardware reset
RY/$\overline{\text{BY}}$: Ready/Busy output
$\overline{\text{BYTE}}$: 8bit, 16bit mode select
VCC : Supply voltage
VSS : GND
NC : Not used

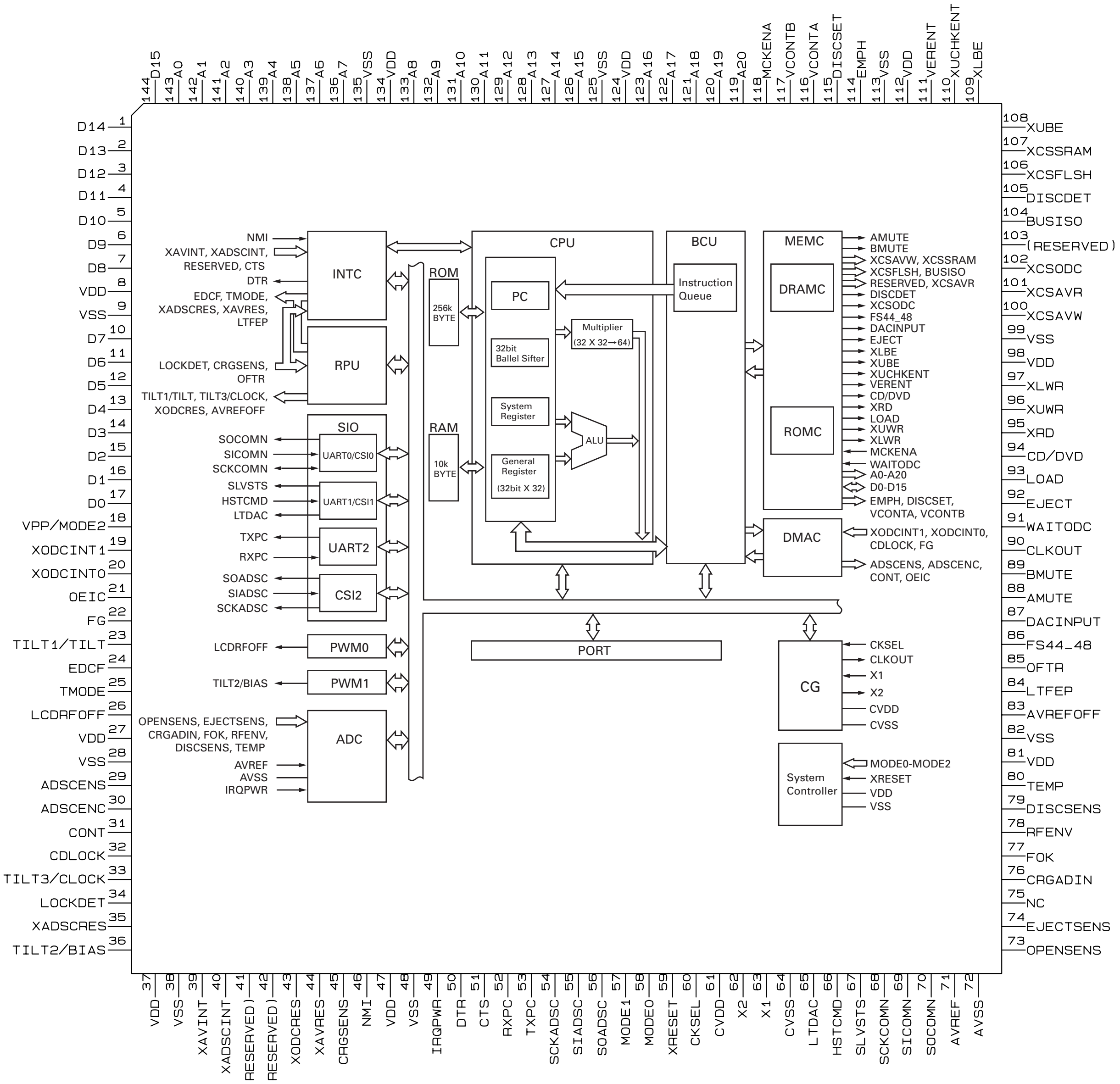
*AK4380VT


MCLK 1
BICK 2
SDTI 3
LRCK 4
PDN 5
SMUTE/CSN 6
DFS/CCLK 7
DIF0/CDTI 8
P/S 9
AOUTR 10
AOUTL 11
VCOM 12
VSS 13
VDD 14
VREF 15
DZF 16
Audio Data Interface
8X Interpolator
8X Interpolator
Δ Σ Modulator
Δ Σ Modulator
LPF
LPF
μP Interface
De-emphasis Control
Clock Divider

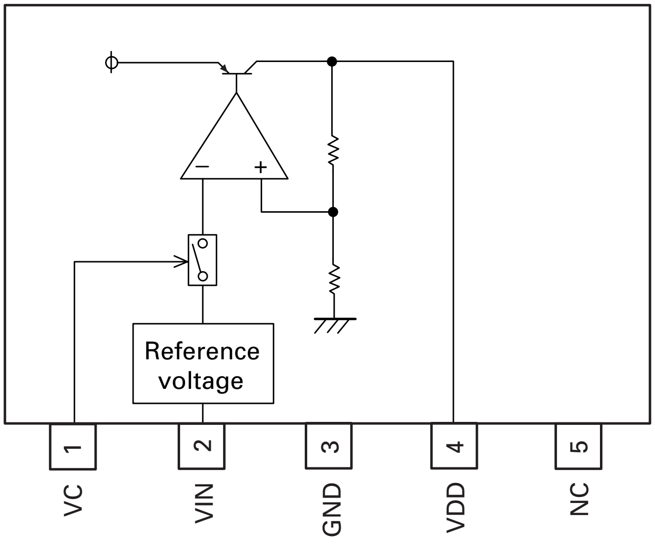
*TC74VCX08FT


1A 1
1B 2
1Y 3
2A 4
2B 5
2Y 6
GND 7
3Y 8
3A 9
3B 10
4Y 11
4A 12
4B 13
VCC 14

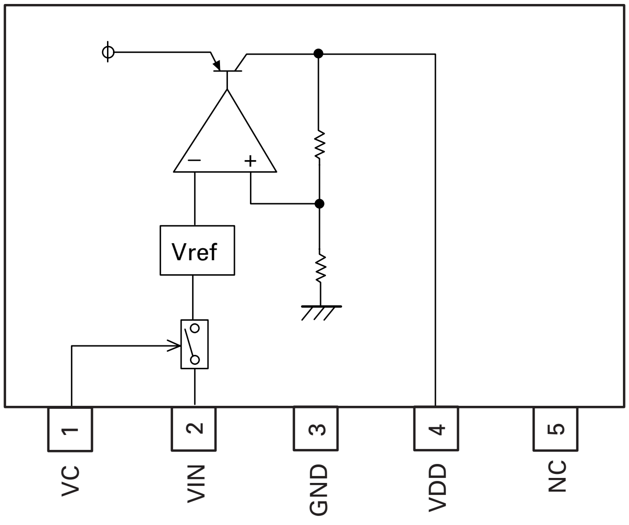
*PE5277A


144 D15
143 A0
142 A1
141 A2
140 A3
139 A4
138 A5
137 A6
136 A7
135 VSS
134 VDD
133 A8
132 A9
131 A10
130 A11
129 A12
128 A13
127 A14
126 A15
125 VSS
124 VDD
123 A16
122 A17
121 A18
120 A19
119 A20
118 MCKENA
117 VCONTB
116 VCONTA
115 DISCSET
114 EMPH
113 VSS
112 VDD
111 VERENT
110 XUCHKENT
109 XLBE
D14 1
D13 2
D12 3
D11 4
D10 5
D9 6
D8 7
VDD 8
VSS 9
D7 10
D6 11
D5 12
D4 13
D3 14
D2 15
D1 16
D0 17
VPP/MODE2 18
XODCINT1 19
XODCINT0 20
OEIC 21
FG 22
TILT1/TILT 23
EDCF 24
TMODE 25
LCDRFOFF 26
VDD 27
VSS 28
ADSCENS 29
ADSCENC 30
CONT 31
CDLOCK 32
TILT3/CLOCK 33
LOCKDET 34
XADSCRES 35
TILT2/BIAS 36
108 XUBE
107 XCSSRAM
106 XCSFLSH
105 DISCDET
104 BUSISO
103 (RESERVED)
102 XCSODC
101 XCSAVR
100 XCSAVW
99 VSS
98 VDD
97 XLWR
96 XUWR
95 XRD
94 CD/DVD
93 LOAD
92 EJECT
91 WAITODC
90 CLKOUT
89 BMUTE
88 AMUTE
87 DACINPUT
86 FS44_48
85 OFTR
84 LTFEP
83 AVREFOFF
82 VSS
81 VDD
80 TEMP
79 DISCSENS
78 RFENV
77 FOK
76 CRGADIN
75 NC
74 EJECTSENS
73 OPENSENS
37 VDD
38 VSS
39 XAVINT
40 XADSCINT
41 (RESERVED)
42 (RESERVED)
43 XODCRES
44 XAVRES
45 CRGSENS
46 NMI
47 VDD
48 VSS
49 IRQPWR
50 DTR
51 CTS
52 RXPC
53 TXPC
54 SCKADSC
55 SIADSC
56 SOADSC
57 MODE1
58 MODE0
59 XRESET
60 CKSEL
61 CVDD
62 X2
63 X1
64 CVSS
65 LTDAC
66 HSTCMD
67 SLVSTS
68 SCKCOMN
69 SICOMN
70 SOCOMN
71 AVREF
72 AVSS
NMI
XAVINT, XADSCINT,
RESERVED, CTS
DTR
EDCF, TMODE,
XADSCRES, XAVRES,
LTFEP
INTC
RPU
LOCKDET, CRGSENS,
OFTR
TILT1/TILT, TILT3/CLOCK,
XODCRES, AVREFOFF
SIO
SOCOMN
SICOMN
SCKCOMN
UART0/CSI0
SLVSTS
HSTCMD
LTDAC
UART1/CSI1
TXPC
RXPC
UART2
SOADSC
SIADSC
SCKADSC
CSI2
LCDRFOFF
PWM0
TILT2/BIAS
PWM1
OPENSENS, EJECTSENS,
CRGADIN, FOK, RFENV,
DISCSENS, TEMP
AVREF
AVSS
IRQPWR
ADC
ROM
256k BYTE
RAM
10k BYTE
CPU
PC
32bit Ballel Sifter
System Register
General Register
(32bit X 32)
Multiplier
(32 X 32→64)
ALU
BCU
Instruction Queue
MEMC
DRAMC
ROMC
DMAC
PORT
CG
System Controller
AMUTE
BMUTE
XCSAVW, XCSSRAM
XCSFLSH, BUSISO
RESERVED, XCSAVR
DISCDET
XCSODC
FS44_48
DACINPUT
EJECT
XLBE
XUBE
XUCHKENT
VERENT
CD/DVD
XRD
LOAD
XUWR
XLWR
MCKENA
WAITODC
A0-A20
D0-D15
EMPH, DISCSET,
VCONTA, VCONTB
XODCINT1, XODCINT0,
CDLOCK, FG
ADSCENS, ADSCENC,
CONT, OEIC
CKSEL
CLKOUT
X1
X2
CVDD
CVSS
MODE0-MODE2
XRESET
VDD
VSS

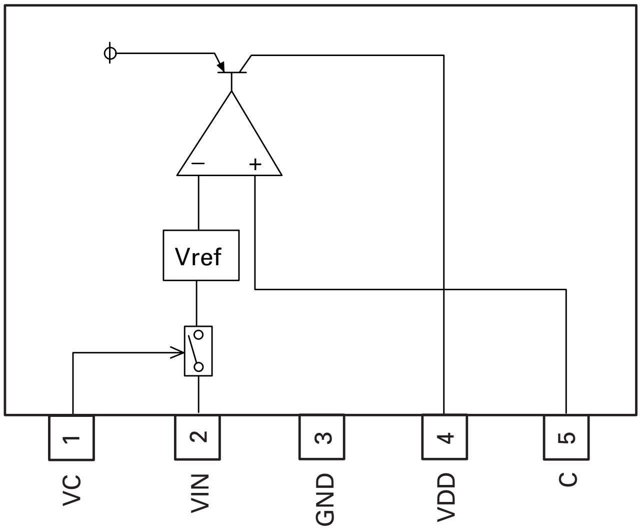
BA033SFP


−
+
Reference voltage
1
2
3
4
5
VC
VIN
GND
VDD
NC

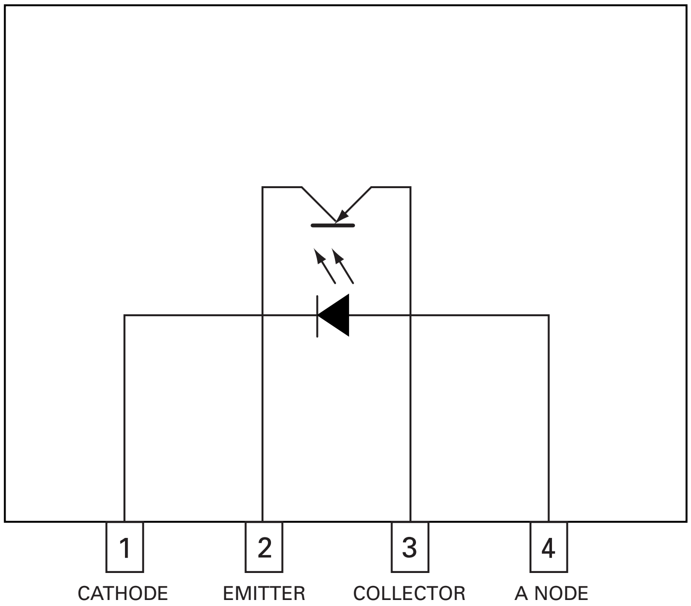
BA18BC0WFP


−
+
Vref
1
2
3
4
5
VC
VIN
GND
VDD
NC

BA00BC0WFP


ϕ
−
+
Vref
1
2
3
4
5
VC
VIN
GND
VDD
C

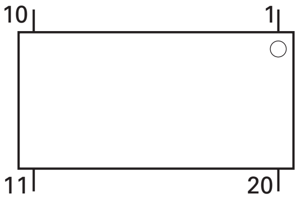
GP1S25


1
2
3
4
CATHODE
EMITTER
COLLECTOR
A NODE

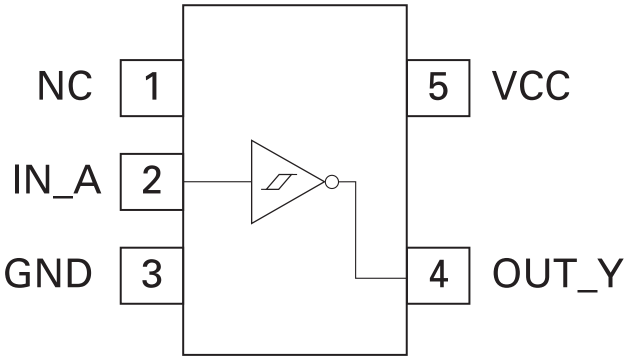
● Pin Functions(PD5582A)

Pin No.	Pin Name	I/O	Function and Operation
1	OSC1	I	External terminal of oscillator circuit for display
2	OSC2	O	External terminal of oscillator circuit for display
3	$\overline{\text{CS}}$	I	Chip select input
4	SCK	I	Serial clock input
5	SI	I	Serial data input
6	$\overline{\text{AC}}$	I	Auto clear input
7-10	P6-P9	O	Port output
11	VSS		GND
12	P0	O	Port output
13	P1/R	O	Port output or R output
14	P2	O	Port output
15	P3/G	O	Port output or G output
16	P4	O	Port output
17	P5/B	O	Port output or B output
18	HOR	I	Horizontal synchronous signal input
19	VERT	I	Vertical synchronous signal input
20	VDD		Positive power supply terminal

*PD5582A



*TC7S14FU


NC
1
IN_A
2
GND
3
5
VCC
4
OUT_Y

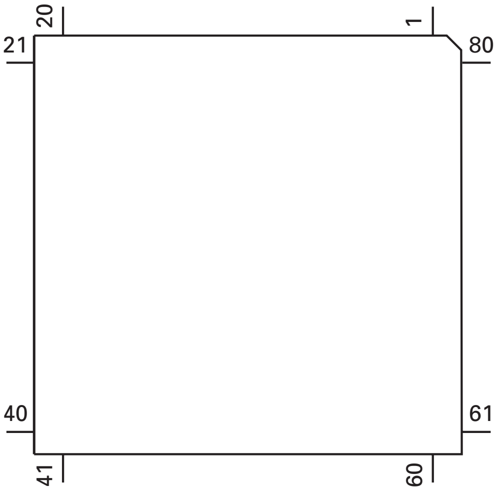
● Pin Functions (PE5230A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	MODEL2	I		Model select analog input
2,3	NC			Not used
4	AVSS			GND
5	DIMMER	O	C	Dimmer control output
6	ADPOW	O	C	ADPOWER control output
7	AVREF1			D/A converter reference voltage (Connects to VDD)
8	ROMDATA	O	C	Data output
9	ROMCLK	O	C	Clock output
10	ROMCS	O	C	Chip select output
11	DOTCON	O	C	OSD dot control output
12	OSDDT	O	C	OSD data output
13	OSDCK	O	C	OSD clock output
14	OSDCS	O	C	OSD chip select
15	OSDBOUT	O	C	OSD paint screen output
16	TDI/FLDI	I	C	Chip test/Data input for flash
17	TDO/FLDO	O	C	Chip test/Data output for flash
18	TCK/FLCK	O	C	Chip test/Clock for flash
19-21	NC			Not used
22	MTR1	O	C	Storage motor changeover/brake-mode designating output 1
23	MTR2	O	C	Storage motor changeover/brake-mode designating output 2
24	MTRPW	O	C	Flap motor driver power switch output
25,26	NC			Not used
27	DACDI	O	C	DAC data output
28	DACCLK	O	C	DAC clock output
29	DACLD	O	C	DAC code output
30	PLSENSE0	I	C	Pulse sense 0
31	PLSENSE1	I	C	Pulse sense 1
32	DEG0SW	I	C	Detection sense SW input of 0 in angle
33	VSS			GND
34	$\overline{\text{PWSENS}}$	I	C	Navigation/R513 power “ON” input
35	$\overline{\text{PWSAVE}}$	O	C	Power save output
36	IPAUTO	I	N	DVDSIP synchronization information
37	$\overline{\text{ISENS}}$	I	N	Illumination sensor input
38	$\overline{\text{DLED}}$	O	N	Burglar alarm LED driving output
39	$\overline{\text{SWVDD}}$	O	N	Remote controller power and external light sensing power outputs
40	BLTPW	O	C	LCD backlight output
41	VPOWER	O	C	Video circuit power output
42	NC			Not used
43	MONFLAME	O	C	Monitor frame control output ($\overline{\text{NTSC}}$/PAL)
44	RGBCOM	O	C	RGB/COMPOSIT select output
45	PEEOUT	O	C	PEE output
46	MODE2	O	C	Display mode changeover output 2
47	MODE3	O	C	Display mode changeover output 3
48	VSEL1	O	C	Change output in COMPOSIT
49	VSEL2	O	C	DVDS compulsion selection change output in COMPOSIT
50	MODE1	O	C	Display mode changeover output 1
51	DUALILM	O	C	Dual illumination color setting output ($\overline{\text{GREEN}}$/AMBER)
52	SEIHIN	I	C	Model select input
53	ILMPW	O	C	ILMPW output
54	PBSENS	I	C	Parking sense input
55	SYSPW	O	C	SYSPW output
56	SELTIME	I	C	AVRGB switching time input
57	VSELIN1	I		VSEL input 1
58	VSELIN2	I	C	VSEL input 2
59	AVON	I	C	New AV display input
60	$\overline{\text{RESET}}$	I		Reset
61	VSYNCIN	I		Frame frequency 50/60Hz (VSINC) input

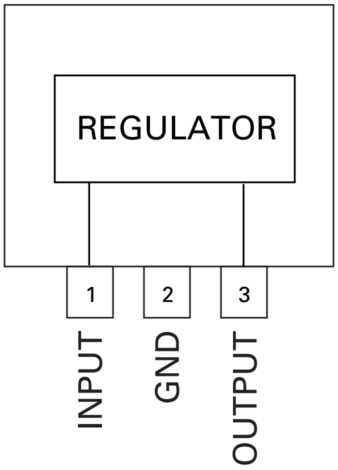
Pin No.	Pin Name	I/O	Format	Function and Operation
62	NC			Not used
63	$\overline{\text{DSENS}}$	I	C	Detach input
64	REMIN	I	C	Remote controlling signal input
65	$\overline{\text{ASENS}}$	I	C	ACC sensor input
66	$\overline{\text{BSENS}}$	I	C	Backup input
67	NC			Not used
68	VDD			VDD
69	X2	O		Oscillator output
70	X1	I		Oscillator input
71	IC			Connection to grounding circuit
72	XT2			Sub-clock terminal
73	TESTIN	I		Test mode
74	AVDD	I		Analog power for A/D converter
75	AVREF0	I		Reference voltage input for A/D converter
76	LSENS	I	C	External light sensor input
77	KEYIN1	I	C	Key input 1
78	KEYIN2	I	C	Key input 2
79	KEYIN3	I	C	Key input 3
80	KEYIN4	I	C	Key input 4

Format	Meaning
C	C MOS
N	N channel open drain

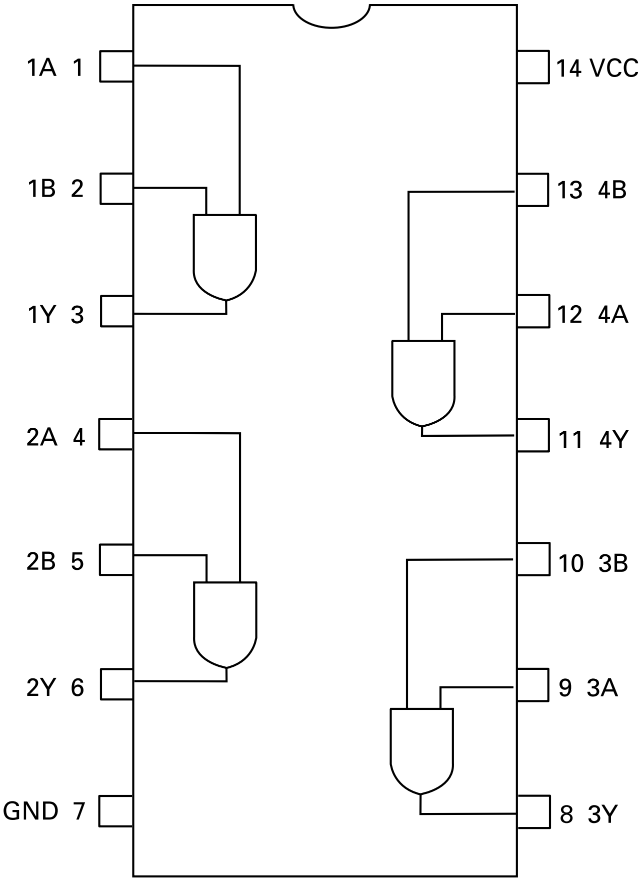
*PE5230A


20
1
21
80
40
61
41
60

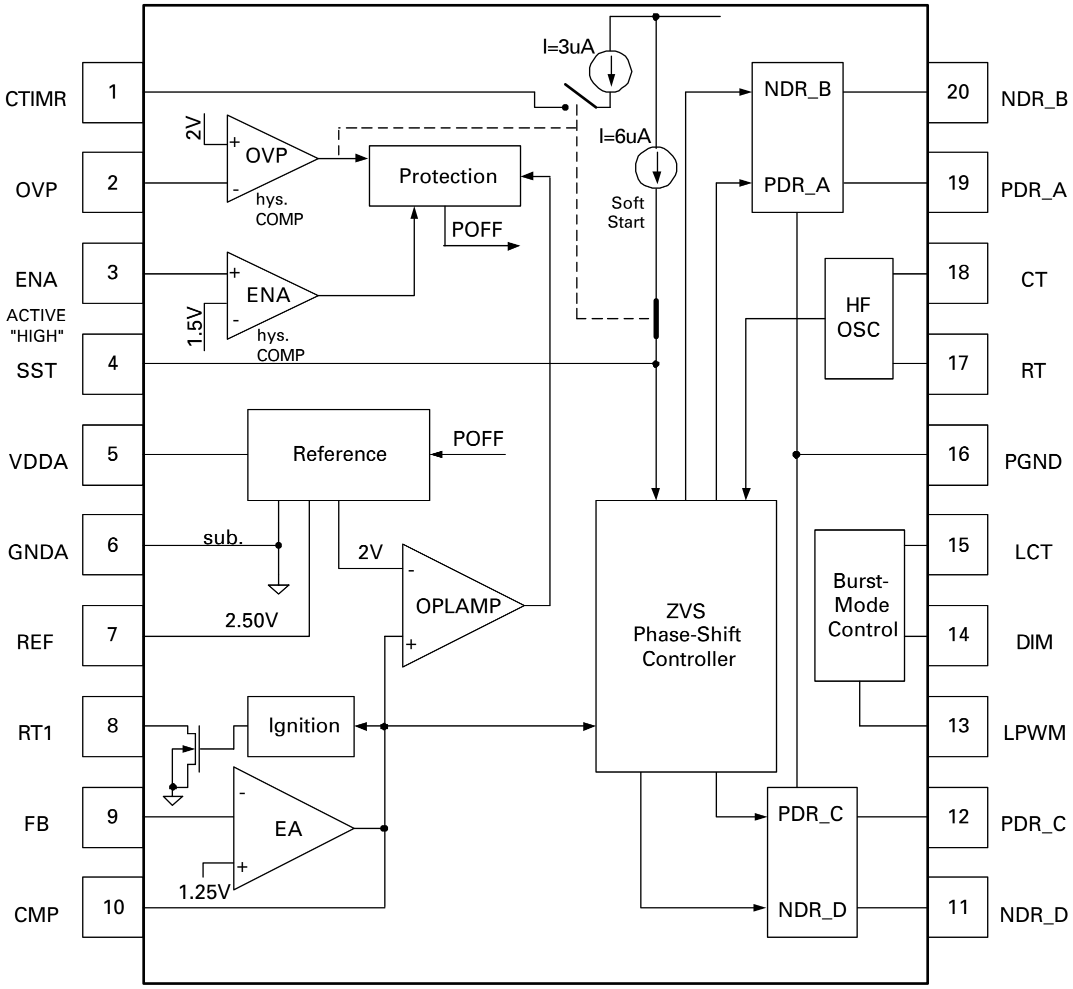
TA7806S


REGULATOR
1
2
3
INPUT
GND
OUTPUT

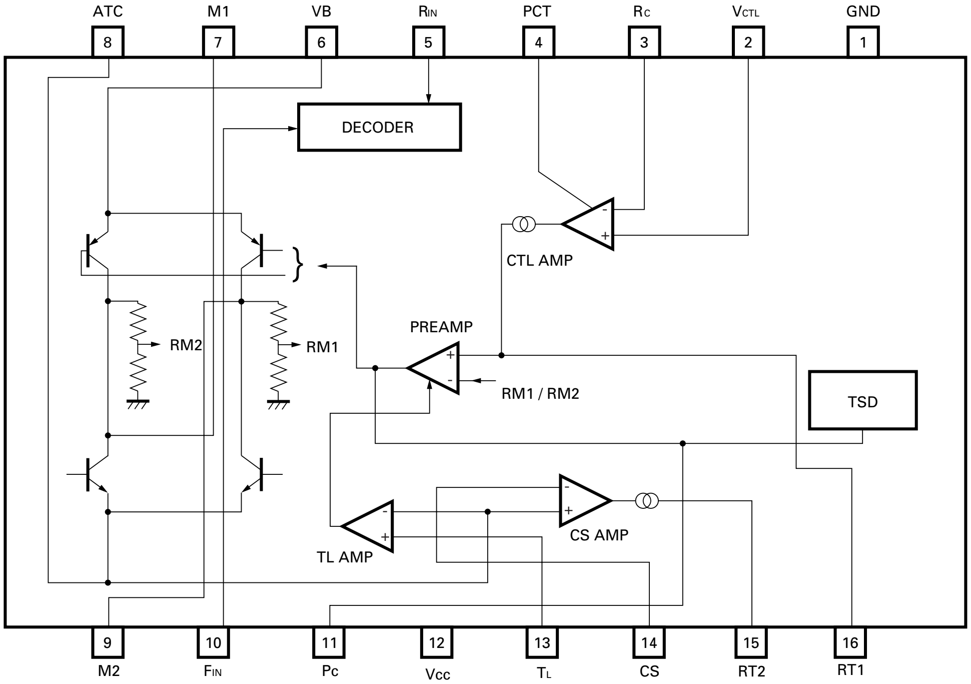
*TC74VHCT08AFT


1A 1
1B 2
1Y 3
2A 4
2B 5
2Y 6
GND 7
14 VCC
13 4B
12 4A
11 4Y
10 3B
9 3A
8 3Y

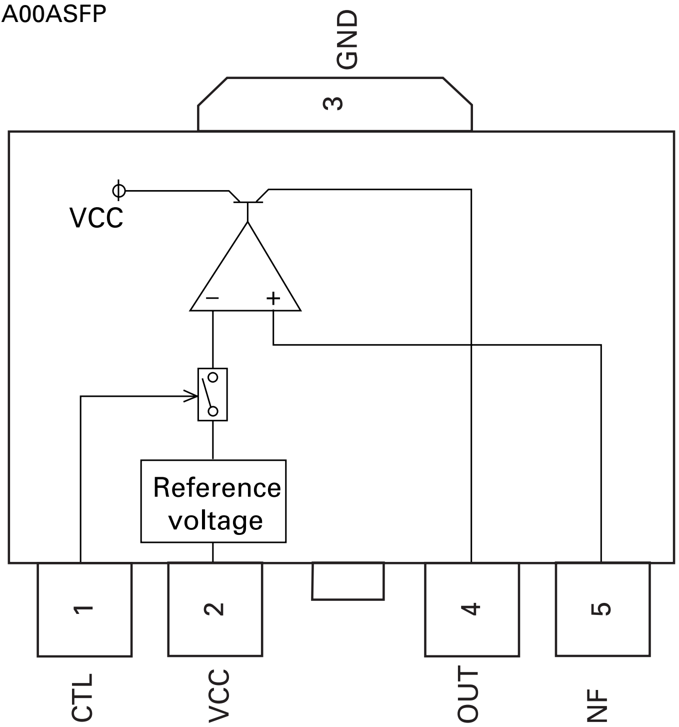
*OZ960IS


CTIMR
1
OVP
2
ENA
3
ACTIVE
"HIGH"
SST
4
VDDA
5
GNDA
6
REF
7
RT1
8
FB
9
CMP
10
I=3uA
I=6uA
Soft
Start
2V
+
-
OVP
hys.
COMP
Protection
POFF
ENA
1.5V
hys.
COMP
Reference
POFF
sub.
2V
OPLAMP
2.50V
Ignition
EA
1.25V
ZVS
Phase-Shift
Controller
NDR_B
PDR_A
HF
OSC
Burst-
Mode
Control
PDR_C
NDR_D
20
NDR_B
19
PDR_A
18
CT
17
RT
16
PGND
15
LCT
14
DIM
13
LPWM
12
PDR_C
11
NDR_D

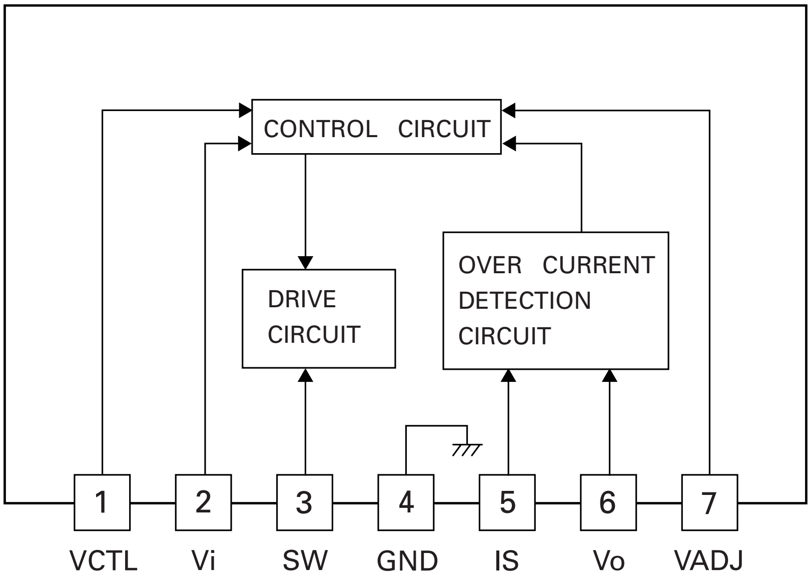
BA6951FS


ATC
8
M1
7
VB
6
RIN
5
PCT
4
RC
3
VCTL
2
GND
1
DECODER
CTL AMP
RM2
RM1
PREAMP
RM1 / RM2
TSD
CS AMP
TL AMP
9
M2
10
FIN
11
Pc
12
Vcc
13
TL
14
CS
15
RT2
16
RT1

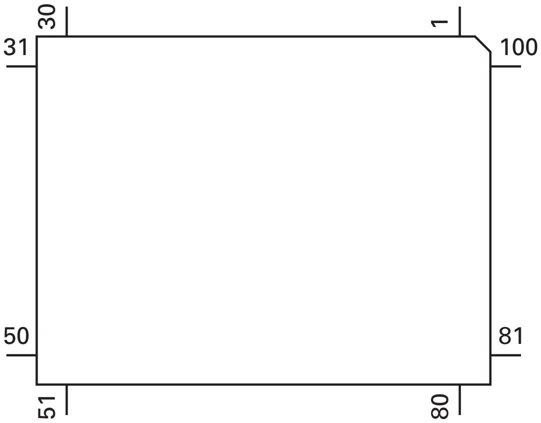
BA00ASFP


GND
3
VCC
−
+
Reference voltage
1
2
4
5
CTL
VCC
OUT
NF

BP5250-1


CONTROL CIRCUIT
DRIVE CIRCUIT
OVER CURRENT DETECTION CIRCUIT
1
2
3
4
5
6
7
VCTL
Vi
SW
GND
IS
Vo
VADJ

*PE5229A

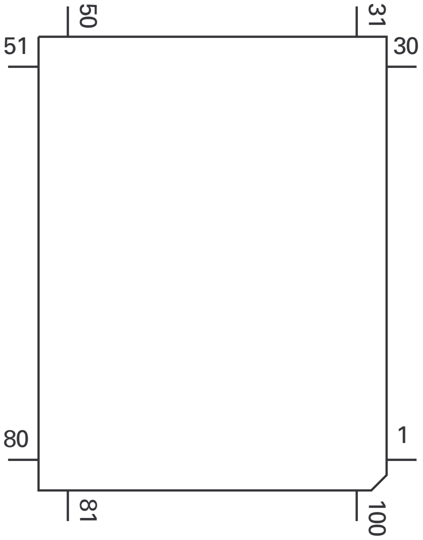

30
1
31
100
50
81
51
80

● Pin Functions(PE5285A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	LCDPOW	O	C	LCD power output
2	NC			Not used
3	ROMDATA	O	C	(ROM correction)data output
4	ROMCLK	O	C	(ROM correction)clock output
5	ROMCS	O	C	(ROM correction)chip select output
6-10	NC			Not used
11	$\overline{\text{RESET}}$			(FLASH use)
12, 13	XT2, 1			Clock input(Not used)
14	VSS			GND
15, 16	X2, 1			System clock input
17	REGOFF			Memory connection for the regulator output stabilization
18	REGC			Regulator operation specification signal
19	VDD			Power supply
20	NC			Not used
21	SYSPW	O	C	System power output
22	IPAUTO	O	C	IP auto ON setting state output(H:auto ON)
23	NC			Not used
24	IPPW	O	C	(IPBUS)Driver power supply output
25	DVSVSEL	O	C	IP-BUS line select(H:DVDS/L:NewAV-IN)
26	DVSSEL	O	C	IP-BUS line select(H:DVDS/L:IP-IN)
27	RMUTE	O	C	Rear mute output
28	MUTE	O	C	System mute output(for IP-BUS)
29	NC			Not used
30	PBSENS	I		Parking sense input
31	MSSRVD	O	C	(MS2)SRVDD power output(3.3v)
32	MSVD	O	C	(MS2)VD power output(8.0v)
33	MSMVD	O	C	(MS2)Main power supply power output(6.3v)
34	MSMCVD	O	C	(MS2)Microcomputer power output(3.3v)
35	IRQPWR	O	C	(MS2)IRQPWR output
36	XRRESET	O	C	(MS2)Reset output
37	TMODE	O	C	(MS2)TEST mode output
38	NC			Not used
39	TESTIN	I		Chip test program input
40	VSS			GND
41	VDD			Power supply
42	MSAMUTE	I		MS mute request
43	PILMPOW	O	C	Loading slot illumination power output
44	ILMPOW	O	C	Illumination power output
45	SWVDD	O	C	LED power supply output
46	NC			Not used
47	LCDDATA	O	C	(LED driver)Data output
48	LCDCLK	O	C	(LED driver)Clock output
49	LCDCE	O	C	(LED driver)enable output
50	LCDINH	O	C	(LED driver)inhibit output
51	CODEIN	I		Model discrimination (0:711 and 712)
52-60	NC			Not used
61	RMMUTE	O	C	Rear monitor mute output
62	NC			Not used
63	FMMUTE	O	C	Front monitor mute output
64	NC			Not used
65	TSK	O	C	Chip test(clock)
66	TSI	O	C	Chip test(data input)
67	TSO	O	C	Chip test(Data output)
68	SEIHIN	I		711(L)/712(H)discrimination input
69	MSIN	I		Master(H)/slave(L)select input
70	ISENS	I		Illumination sense input
71, 72	NC			Not used

Pin No.	Pin Name	I/O	Format	Function and Operation
73	TEST			IC test pin(FLASH use)
74	MODELIN	I		Model select input
75, 76	KEYDT0, 1	I		Key input 0, 1
77	VDSENS	I		MS2VD sense
78	DISCSET	I		(MS2)DISC sense input
79	NC			Not used
80	MEMHLD	O	C	Memory hold output(standby=L,active=H)
81	$\overline{\text{ADPW}}$	O	C	A/D converter power supply output
82	(VDD)			A/D power supply
83	(VDD)			A/D reference voltage
84	(GND)			A/D GND
85	RX	I		(IP-BUS)data input
86	TX	O	C	(IP-BUS)data output
87	NC			Not used
88, 89	NC			Not used
90	$\overline{\text{DSENS}}$	I		Detach sense
91	$\overline{\text{REMIN}}$	I		Remote control input
92	$\overline{\text{ASENS}}$	I		Acc sense input
93	$\overline{\text{BSENS}}$	I		Bup sense input
94	NC			Not used
95	MSTOSYS	I		MS2 control (Rx)
96	SYSTOMS	O	C	MS2 control (Tx)
97	NC			Not used
98	$\overline{\text{CSENS}}$	I		CLOSE sense
99	NC			Not used
100	PEE	O	C	Beep tone output

*PE5285A



Format	Meaning
C	C MOS

7.3 EXPLANATION

7.3.1 MECHANISM DESCRIPTION

- **THE DRIVE MECHANISM SECTION**
- **Outlines of the hardwares**

Driving Motor

The angular adjustment and monitor ejection control (position and angle) motor

Sensors

Photo interrupter for angular detection *2

Zero angle detection switch (L when the angle is 0 degrees)

- **Electrical criteria**

Sensor signals

Encoder pulse

DEGPUL1 : Pulse sensor 1 for angular detection

DEGPUL2 : Pulse sensor 2 for angular detection

Sensor signals

DEG0SW : monitor angle detection is 0 degrees

Control signals

MTRPW : Motor electrical power supply control (H when turned ON)

MTR1 : Motor control signal 1

MTR2 : Motor control signal 2

	Forward rotation	Reverse rotation	Brake	Standby
MTR1	H	L	H	L
MTR2	L	H	H	L

Motor terminal voltages (set by hardware settings)

* The voltage required to sustain a constant rotation rate.

High-speed mode : VMH = 6.5 – 10.0V

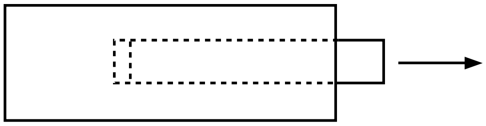
Low-speed mode : VML = 2.5 – 5.5V

- **Operation Summary**

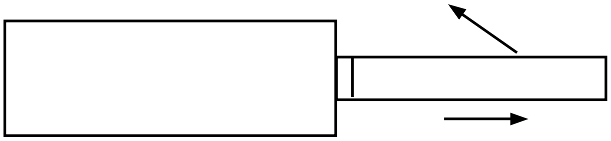
1. The back and forth movements, as well as the angular adjustment controls of the monitor are all driven by the operation of one motor.
2. In order to detect the startup angle of the motor, the photo interrupter will detect and count the pulse.
3. For a reset start, the retraction operation is performed first followed by the ejection operation resulting in a mounted condition (the angle of the monitor in a mounted condition is 100 degrees).
4. Angular adjustments are performed by using the ANGLE +/- keys (the ANGLE +/- keys are effective for adjusting angles, between 55 and 110 degrees in 28 increments).
   * With its origin at the point where the DEG0SW switches from H to L,, it is 30 edges to the 55 degree position, and 57 edges to the 110 degree position.
5. The monitor retraction operation is triggered by pressing the OPEN/CLOSE key (or when the ACC OFF state is attained when the automatic ejection and retraction setting is set to ON) (or if the ACC OFF key is pressed when the system is in the automatic ejection and retraction setting).
6. The back and forth movements are set to a high-speed mode and angular control is set to a low-speed mode, at all times (switch is set by the hardware).
7. Braking is continuous even after the motor has stopped.
8. The brake is applied once when the motor switches from one operating mode to another.

● Ejection Operation

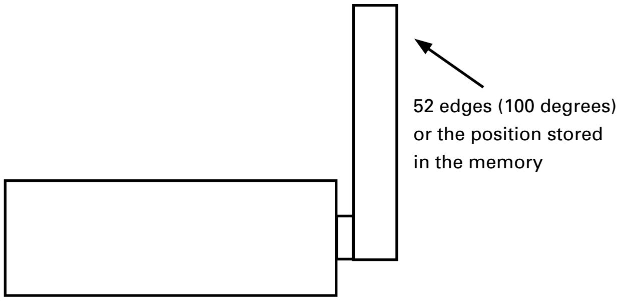
1. When the OPEN/CLOSE key is pressed or when the ACC is turned ON, the motor is driven in a high-speed mode.



2. The motor is driven in a low-speed mode, when the DEG0SW is switched from L to H.

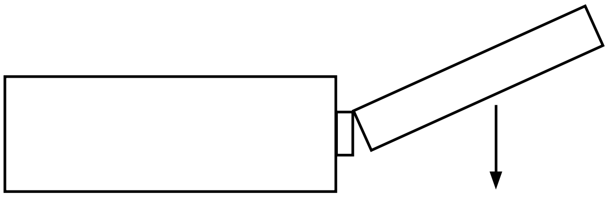


3. The counting of angular pulses starts from a point where the DEG0SW is switched from L to H, and the motor will stop when 52 edges (100 degrees), of the angular pulse is counted (brake mode).
   If a previous angle has been stored in the memory however, the motor will continue to operate until that angle has been attained. 54 edges (100 degrees) or the position stored in the memory

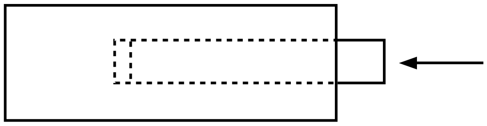


● Retraction Operation

1. The motor is driven in a low-speed mode when the OPEN/CLOSE key is pressed or after six seconds when an ACC OFF state is attained (when the automatic ejection and retraction setting is set to ON).



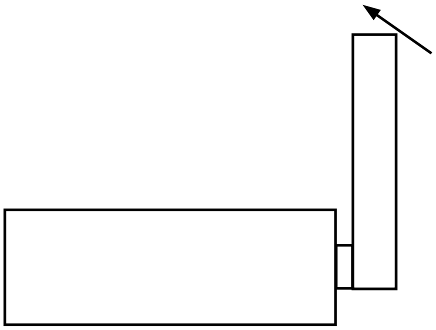
2. The motor is driven in a high-speed mode when the DEG0SW switches from H to L. The motor operation is brought to a halt when the angular pulse cannot be detected for a period of 500 ms (brake mode).

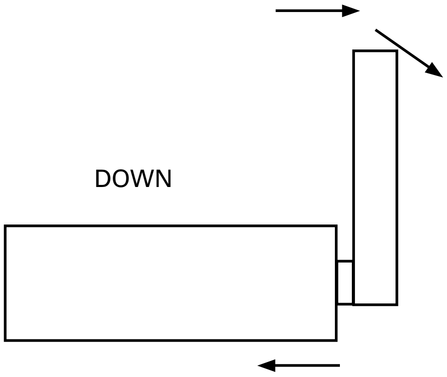


● Angular adjustments

1. When the UP key is pressed, the monitor is raised from its initial position (100 degrees), and will continue to rise until the key is released. The operation will stop one pulse after the release of the UP key.

2. The DOWN key operation results in similar motions.





● Protective Operation

1. During the horizontal ejection of the monitor, when the angular pulse cannot be detected for a period of 500ms, the retraction operation will be triggered.

2. During the startup (or angling down) of the motor, when the angular pulse cannot be detected for a period of 500ms, the brake mode will be triggered.

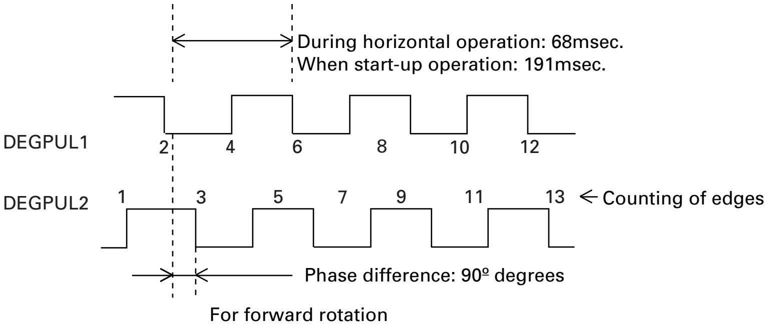
3. During the horizontal retraction of the monitor, when the angular pulse cannot be detected for a period of 500ms, the brake mode will be triggered.

● DISPLAY SECTION MECHANICAL OPERATION SPECIFICATION

● Direction of rotation

Forward rotation (ejection):
The phase of DEGPUL1 advances by 90 degrees.

Reverse rotation (retraction)
The phase of DEGPUL1 loses by 90 degrees.

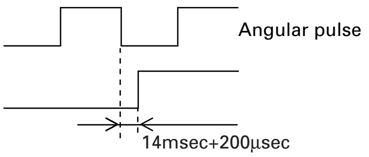

During horizontal operation: 68msec.
When start-up operation: 191msec.
DEGPUL1
2
4
6
8
10
12
DEGPUL2
1
3
5
7
9
11
13
← Counting of edges
Phase difference: 90º degrees
For forward rotation

● Cautions

1. The angular position is continuously incremented, with the last position stored in the memory for use when the system is turned on again.

However, when the display is forcibly moved by the hand etc. ,the position is not memorized.

2. If a specified pulse is not detected during an operation, it is determined that an operational abnormality exists, and the operation will be halted at that point.
3. The brake operation is performed at 14ms + 200ms (← time required for monitoring the chattering) after the prescribed L angular pulses are detected.


Angular pulse
14msec+200µsec

● Operations of the drive section for each set mode

Mode setting

Automatic ejection and retraction setting: ON

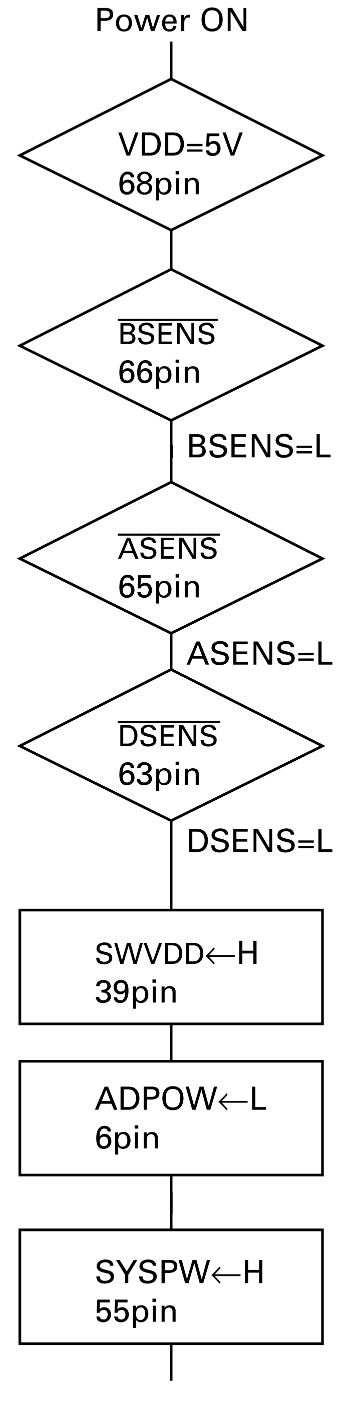
ACC operation mode	In OPEN condition or when in ACC OFF condition	During OPEN operation or when in ACC OFF condition	During CLOSE operation or when in ACC OFF condition	In CLOSE condition or when in ACC OFF condition
ACC OFF→ON	In OPEN condition ↓ Remaining in OPEN condition	–	–	In CLOSE condition ↓ OPEN operation ↓ Reverse operation
ACC ON→OFF	In OPEN condition ↓ ↓ 6 sec Forward operation ↓ CLOSE	Continued OPEN operation ↓ Reverse operation ↓ 6 sec Continued OPEN operation ↓ CLOSE	Continued CLOSE operation ↓ CLOSE	In CLOSE condition ↓ ↓ Remaining in CLOSE condition
Final position memory	OPEN	OPEN	CLOSE	CLOSE

Mode setting

Automatic ejection and retraction setting: OFF

ACC operation mode	In OPEN condition or when in ACC OFF condition	During OPEN operation or when in ACC OFF condition	During CLOSE operation or when in ACC OFF condition	In CLOSE condition or when in ACC OFF condition
ACC OFF→ON	In OPEN condition ↓ Remaining in OPEN condition	–	–	In CLOSE condition ↓ Remaining in CLOSE condition
ACC ON→OFF	In OPEN condition ↓ ↓ Remaining in OPEN condition	Continued OPEN operation ↓ ↓ Reverse operation	Continued CLOSE operation ↓ ↓ CLOSE	CLOSE condition ↓ ↓ Remaining in CLOSE condition
Final position memory	OPEN	OPEN	CLOSE	CLOSE

7.3.2 OPERATIONAL FLOW CHART

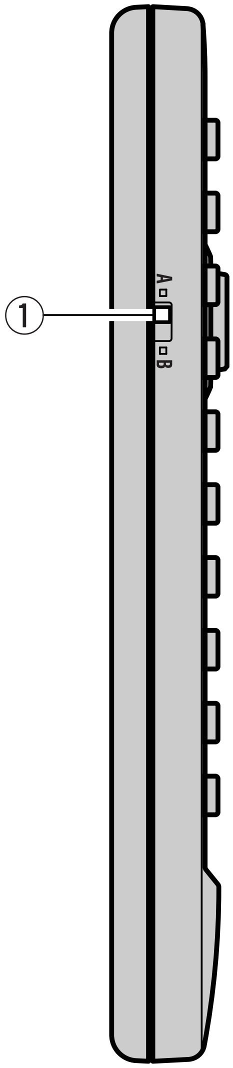

Power ON
VDD=5V
68pin
$\overline{\text{BSENS}}$
66pin
BSENS=L
$\overline{\text{ASENS}}$
65pin
ASENS=L
$\overline{\text{DSENS}}$
63pin
DSENS=L
SWVDD←H
39pin
ADPOW←L
6pin
SYSPW←H
55pin
Completes power-on operation.

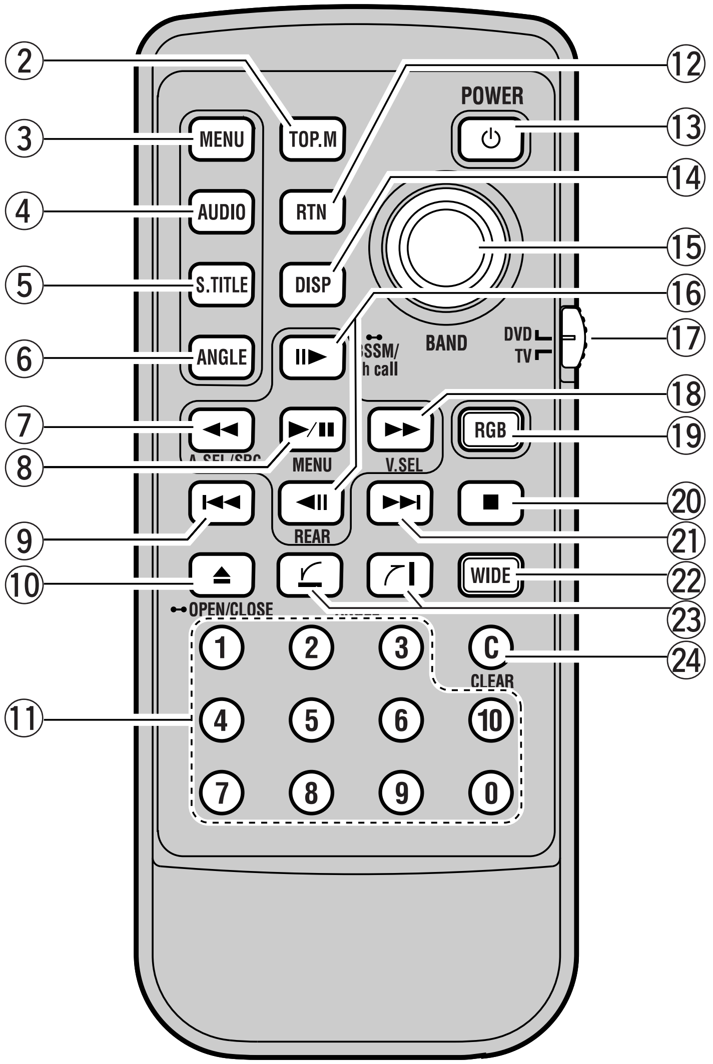
8. OPERATIONS AND SPECIFICATIONS

8.1 OPERATIONS

Key Finder

Remote Controller




②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
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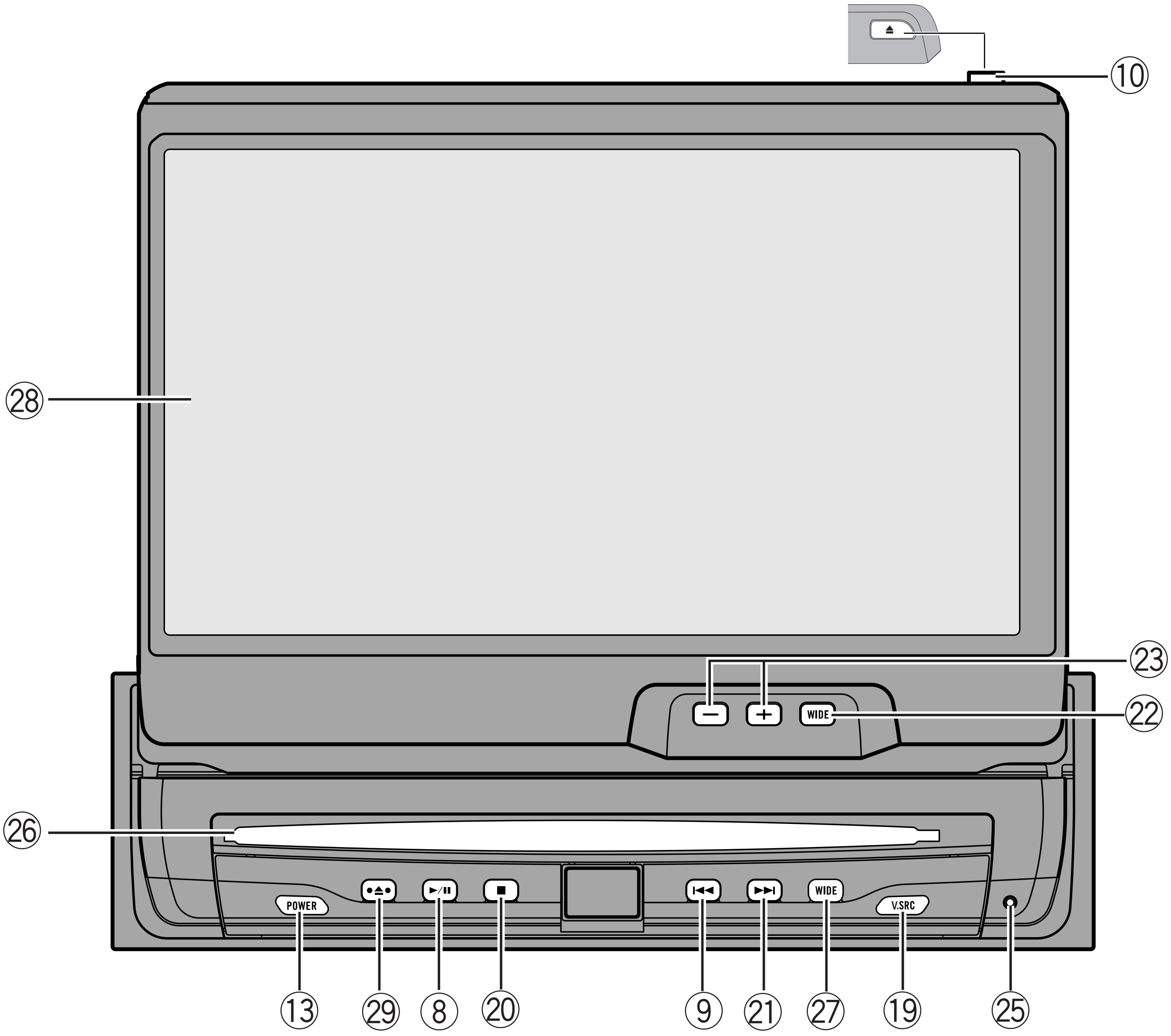
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑
㉒
㉓
㉔
POWER
MENU
TOP.M
AUDIO
RTN
S.TITLE
DISP
ANGLE
SSM/
h call
BAND
DVD
TV
MENU
V.SEL
RGB
REAR
WIDE
OPEN/CLOSE
1
2
3
C
CLEAR
4
5
6
10
7
8
9
0

① Remote control code selection switch
② TOP MENU button
③ MENU button
④ AUDIO button
⑤ SUBTITLE button
⑥ ANGLE button
⑦ REVERSE (◀◀) button
⑧ PLAY/PAUSE (►/II) button
⑨ PREVIOUS (I◀◀) button
⑩ OPEN/CLOSE (⏏) button
⑪ Number buttons
⑫ RETURN button
⑬ POWER button
⑭ DISPLAY button
⑮ Joystick
⑯ STEP (◀II)/(II►) buttons
⑰ Remote control operation mode switch
⑱ FORWARD (►►) button
⑲ RGB button
⑳0STOP (■) button
㉑ NEXT (►►I) button
㉒ WIDE button
㉓ ANGLE (⊆)/(⌐I) buttons
㉔ CLEAR button
㉕ RESET button
㉖6Disc loading slot
㉗ V.SOURCE button
㉘ Display
㉙ Eject button

This Product

The following diagram shows the display when it is deployed.



Note:

- This product plays one standard 12 cm (5 in.) or 8 cm (3 in.) single disc at a time. Do not use an adapter when playing 8 cm (3 in.) disc.
- Do not insert anything into the Disc Loading Slot other than discs that are compatible with this product.
- The DVD function can be turned ON/OFF with the disc remaining in this product.
- A disc left partially inserted after ejection may incur damage or fall out.

Switching Power ON/OFF

Switching Power ON

Press the SOURCE button on the Head Unit.

Press repeatedly until DVD is selected, and the disc starts playing.

Note:
- If you were previously playing a DVD, playback of that disc resumes from where you left off.
- With some discs, a menu may be displayed.

Switching Power OFF

Press the SOURCE button for 1 second on the Head Unit.

Power to the Head Unit switches OFF.

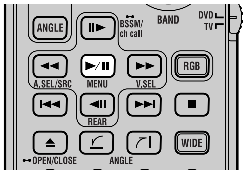
When using a rear display

- Even if the source selected with the head unit is not DVD, if you switch power to this product ON with the POWER button, you can watch the DVD picture from this product on the rear display.
- Regardless of whether the head unit is switched ON/OFF, you can switch power to this product ON/OFF.

Precautions

- When you have switched power to this product ON by pressing the POWER button, be sure not to forget to switch power to this product OFF. If you switch power to this product OFF after switching to DVD video display, the display shows that power to this product has been switched OFF.
- When you eject a source disc (CD or MD) selected with the head unit, power to the head unit switches OFF. Depending on the connection method, the picture on the rear display may disappear.

Disc (DVD/Video CD/CD) Playback



Press the PLAY/PAUSE (▶/II) button.

The playback mark (▷) is displayed for 4 seconds and the disc starts playing.

Note:
- Pressing the PLAY/PAUSE (▶/II) button when a disc is playing, pauses playback.
- If the last disc played was a DVD, playback starts from the point on that disc where you stopped play previously. With some discs, a menu may be displayed and playback may not be possible from where you left off previously.

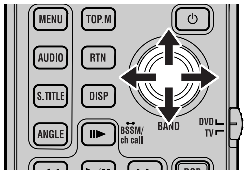
Working with the Menu Screen

DVD Video CD

When DVDs offering menu or Video CDs featuring the PBC (Playback Control) function start playing, a menu is displayed.

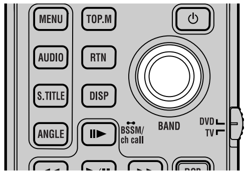
With DVDs

1



Use the joystick to select the desired MENU option.

2



Click the joystick.

Playback starts from the selected menu option.

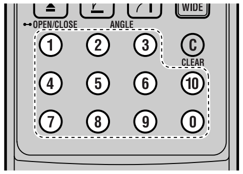
■ To Display the Menu

You can display the menu by pressing the MENU button or TOP MENU button while a disc is playing. Pressing either of these buttons again lets you start playback from the location selected from the menu. For details, refer to the instructions provided with the disc.

Note:
- The way to display the menu differs depending on the disc.

Continued overleaf

With Video CDs


OPEN/CLOSE
ANGLE
WIDE
CLEAR

Press the number buttons to select a desired menu option.

Playback starts from the selected menu option.
Operation with the joystick is not possible.

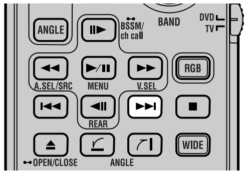
■ To Display the Menu

You can display the menu by pressing the RETURN button while PBC playback. For details, refer to the instructions provided with the disc.

Note:
- When menu are two or more pages long, press the PREVIOUS (|◀◀)/NEXT (▶▶|) button to switch between displays.
- To play a disc without using a menu (without PBC playback), when the disc is stopped press the appropriate number button to select the desired track. To return to PBC playback, stop playback and press the PLAY/PAUSE (▶/❚❚) button.

Chapter and Track Advance/Return

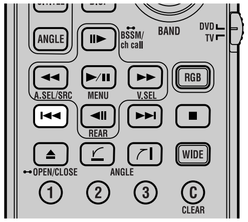
Skipping to the Next Chapter/Track


ANGLE
BSSM/ ch call
BAND
DVD
TV
RGB
A.SEL/SRC
MENU
V.SEL
REAR
WIDE
OPEN/CLOSE
ANGLE

During play, press the NEXT (▶▶|) button .

Chapter/track numbers are displayed for 8 seconds and you advance to the next chapter/track.

Returning to the Previous Chapter/Track


ANGLE
BSSM/ ch call
BAND
DVD
TV
RGB
A.SEL/SRC
MENU
V.SEL
REAR
WIDE
OPEN/CLOSE
ANGLE
CLEAR

During play, press the PREVIOUS (|◀◀) button .

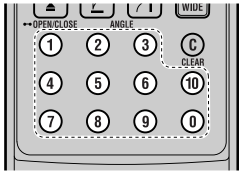
Chapter/track numbers are displayed for 8 seconds and you return to the beginning of the current chapter/track.

Press the PREVIOUS (|◀◀) button twice in succession takes you to the beginning of the chapter/track before the current chapter/track.

Specifying Title/Chapter/Track (Direct Search)

Specifying Title

DVD


OPEN/CLOSE
ANGLE
WIDE
CLEAR

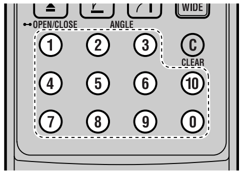
Press the number button corresponding to a desired title number when the disc is stopped.

Title number is displayed for 8 seconds and playback starts from the selected title.

To select 3, press button 3.
To select 10, press buttons 10 and 0 in order.
To select 23, press buttons 10, 10 and 3 in order.

Specifying Chapter

DVD


OPEN/CLOSE
ANGLE
WIDE
CLEAR

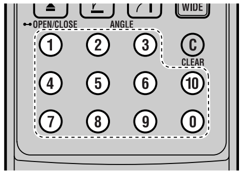
Press the number button corresponding to a desired chapter number during playback.

Chapter number is displayed for 8 seconds and playback starts from the selected chapter.

To select 3, press button 3.
To select 10, press buttons 10 and 0 in order.
To select 23, press buttons 10, 10 and 3 in order.

Specifying Track

Video CD


OPEN/CLOSE
ANGLE
WIDE
CLEAR

Press the number button corresponding to a desired track number.

Track number is displayed for 8 seconds and playback starts from the selected track.

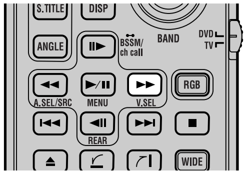
To select 3, press button 3.
To select 10, press buttons 10 and 0 in order.
To select 23, press buttons 10, 10 and 3 in order.

Note:
- With some discs, the prohibited mark "⃠" may be displayed and operation may not be possible.
- With Video CD, Direct Search is not possible during PBC playback.

Disc Fast Forward/Reverse

Fast Forward

1


S.TITLE
DISP
ANGLE
BSSM/
ch call
BAND
DVD
TV
RGB
A.SEL/SRC
MENU
V.SEL
REAR
WIDE

During play, continue pressing the FORWARD (▶▶) button.

The fast forward mark (▷▷) is displayed while pressing the button and disc fast forward is performed.

2

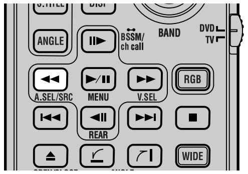
Release the FORWARD (▶▶) button at the point you want to watch/listen.

Playback resumes from that point.

Note:
- If you continue pressing the FORWARD (▶▶) button for 5 seconds, the color of the fast forward mark (▷▷) changes from white to blue. When this happens, fast forward continues even if you release the FORWARD (▶▶) button. To resume playback at a desired point, press the PLAY/PAUSE (▶/❚❚) button.
- If you fast forward to the end of a CD, fast forward continues from the beginning of the disc.
- Fast forward may not be possible at certain locations on some discs. If this happens, normal playback automatically resumes.

Fast Reverse

1


ANGLE
BSSM/
ch call
BAND
DVD
TV
RGB
A.SEL/SRC
MENU
V.SEL
REAR
WIDE

During play, continue pressing the REVERSE (◀◀) button.

The fast reverse mark (◁◁) is displayed while pressing the button and disc fast reverse is performed.

2

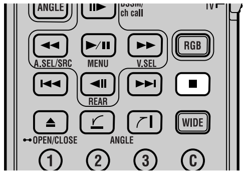
Release the REVERSE (◀◀) button at the point you want to watch/listen.

Playback resumes from that point.

Note:
- If you continue pressing the REVERSE (◀◀) button for 5 seconds, the color of the fast reverse mark (◁◁) changes from white to blue. When this happens, fast reverse continues even if you release the REVERSE (◀◀) button. To resume playback at a desired point, press the PLAY/PAUSE (▶/❚❚) button.
- If you fast reverse to the beginning of a CD, normal playback resumes.
- Fast reverse may not be possible at certain locations on some discs. If this happens, normal playback automatically resumes.

Stopping Playback

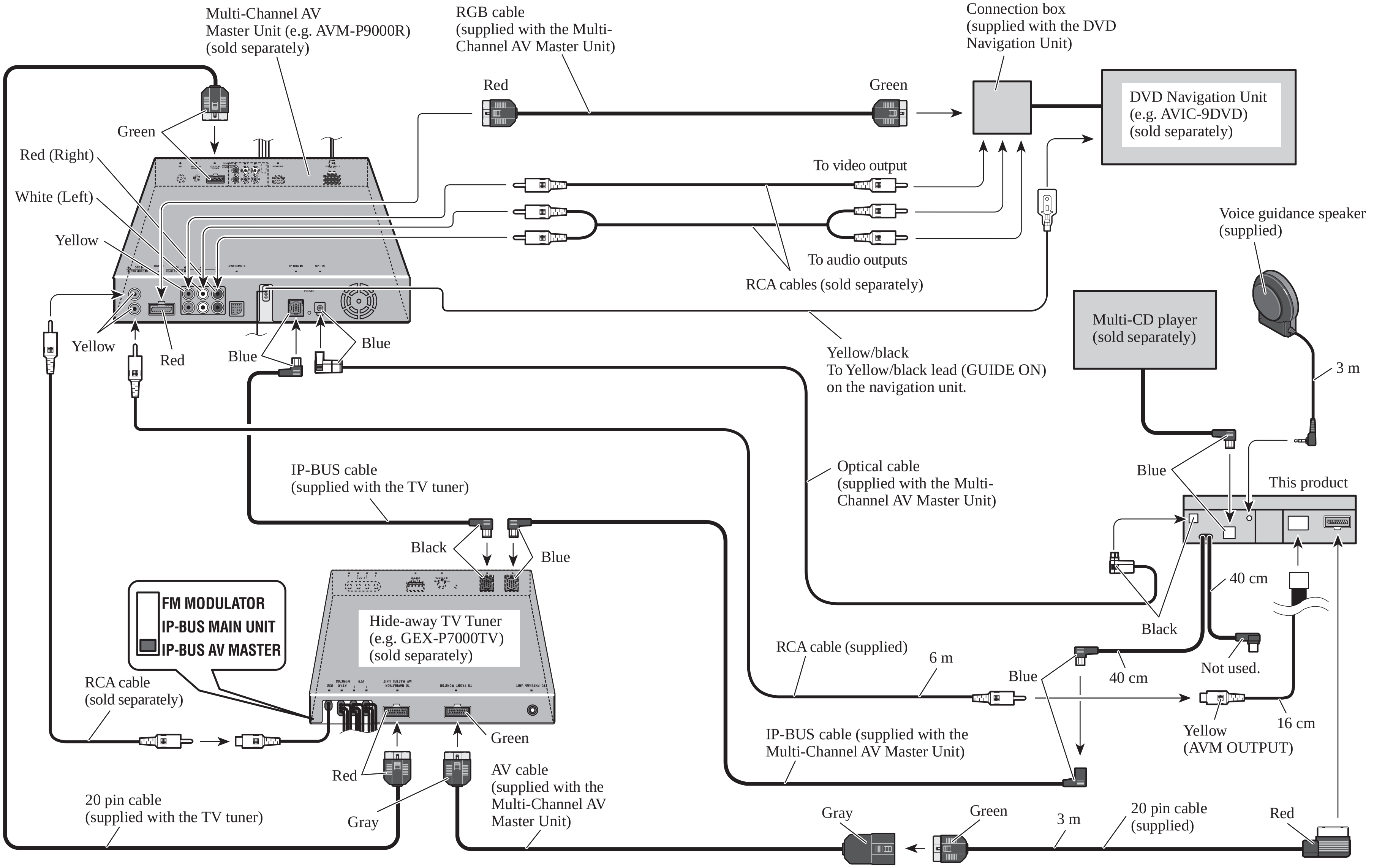
DVD Video CD


ANGLE
ch call
TV
RGB
A.SEL/SRC
MENU
V.SEL
REAR
WIDE
OPEN/CLOSE
ANGLE
1
2
3
C

Press the STOP (■) button.

Note:
- When you stop DVD or Video CD playback (during PBC playback only) by pressing the STOP (■) button, that location on the disc is memorized enabling playback from that point when you play the disc again.

● CONNECTION DIAGRAM


Multi-Channel AV
Master Unit (e.g. AVM-P9000R)
(sold separately)
RGB cable
(supplied with the Multi-
Channel AV Master Unit)
Connection box
(supplied with the DVD
Navigation Unit)
Red
Green
DVD Navigation Unit
(e.g. AVIC-9DVD)
(sold separately)
Green
Red (Right)
White (Left)
Yellow
To video output
To audio outputs
RCA cables (sold separately)
Voice guidance speaker
(supplied)
Multi-CD player
(sold separately)
Yellow
Red
Blue
Blue
Yellow/black
To Yellow/black lead (GUIDE ON)
on the navigation unit.
3 m
IP-BUS cable
(supplied with the TV tuner)
Optical cable
(supplied with the Multi-
Channel AV Master Unit)
Blue
This product
Black
Blue
40 cm
FM MODULATOR
IP-BUS MAIN UNIT
IP-BUS AV MASTER
Hide-away TV Tuner
(e.g. GEX-P7000TV)
(sold separately)
Black
RCA cable (supplied)
6 m
Blue
40 cm
Not used.
RCA cable
(sold separately)
Yellow
(AVM OUTPUT)
16 cm
Green
IP-BUS cable (supplied with the
Multi-Channel AV Master Unit)
Red
AV cable
(supplied with the
Multi-Channel AV
Master Unit)
20 pin cable
(supplied with the TV tuner)
Gray
Gray
Green
3 m
20 pin cable
(supplied)
Red

8.2 SPECIFICATIONS

General

Power source ...... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system .... Negative type
Max. current consumption .... 5 A
Backup current ....Less than 12 mA
Dimensions
(DIN)
(chassis) .... 180 (W) × 50 (H) × 160 (D) mm
[7-1/8 (W) × 2 (H) × 6-1/4 (D) in]
(nose) .... 188 (W) × 58 (H) × 31 (D) mm
[7-3/8 (W) × 2-1/4 (H) × 1-1/4 (D) in]
(D)
(chassis) .... 178 (W) × 50 (H) × 165 (D) mm
[7 (W) × 2 (H) × 6-1/2 (D) in]
(nose) .... 170 (W) × 46 (H) × 26 (D) mm
[6-3/4 (W) × 1-3/4 (H) × 1 (D) in]
(display) .... 169 (W) × 125 (H) × 16 (D) mm
[6-5/8 (W) × 4-7/8 (H) × 5/8 (D) in]
Weight .... 2.0 kg (4.4 lbs)

Display

Screen size/Aspect ratio .... 7 inch wide/16:9
(effective display area: 154 × 87 mm)
Pixels .... 336,960 (1,440 × 234)
Type .... TFT active matrix, transmissive type
Color system [For U.S. and Canadian models]
.... NTSC Compatible
Color system [Other area models]
.... NTSC/PAL Compatible
Operating temperature range .... –20 to +60 °C
Storage temperature range .... –40 to +85 °C
Angle Adjustment .... 55 — 110°
Initial setting angle: 100°

Audio

(with DVD, at Sampling frequency 96 kHz)

Frequency response .... 5 – 44,000 Hz
Signal-to-noise ratio [For U.S. and Canadian models]
.... 97 dB (1 kHz) (IHF-A network)
(CD: 96 dB (1 kHz) (IHF-A network))
Signal-to-noise ratio [Other area models]
.... 97 dB (1 kHz) (IEC-A network)
(CD: 96 dB (1 kHz) (IEC-A network))
Dynamic range .... 96 dB (1 kHz)
(CD: 95 dB (1 kHz))
Distortion .... 0.008 % (1 kHz)
Output Level .... 1.0 V (1 kHz, 0 dB)
Number of channels .... 2 (stereo)

Player

System .... DVD-Video, Video CD,
Compact disc audio system
Usable discs .... DVD-Video, Video CD, Compact disc
Signal format
.... Sampling frequency: 44.1/48/96 kHz
Number of quantization bits: 16/20/24; linear
Region Number
.... For U.S. and Canadian models: 1
For European models: 2
For Southeast Asian models: 3
For South American and Oceanian models: 4

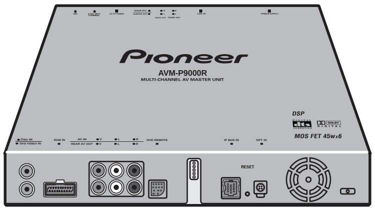
Video

Output level .... 1.0 Vp-p/75 Ω (±0.2 V)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

Service Manual



ORDER NO.
CRT2518

MULTI-CHANNEL AV MASTER UNIT

AVM-P9000R UC
AVM-P9000R EW
AVM-P9000 ES

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- **Manufactured under license from Digital Theater Systems, Inc. "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.**

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PIONEER CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE INC. P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.
PIONEER EUROPE NV Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE.LTD. 253 Alexandra Road, #04-01, Singapore 159936

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K-ZZY. MAY 2000 Printed in Japan

1. SAFETY INFORMATION(AVM-P9000R/UC)

CAUTION

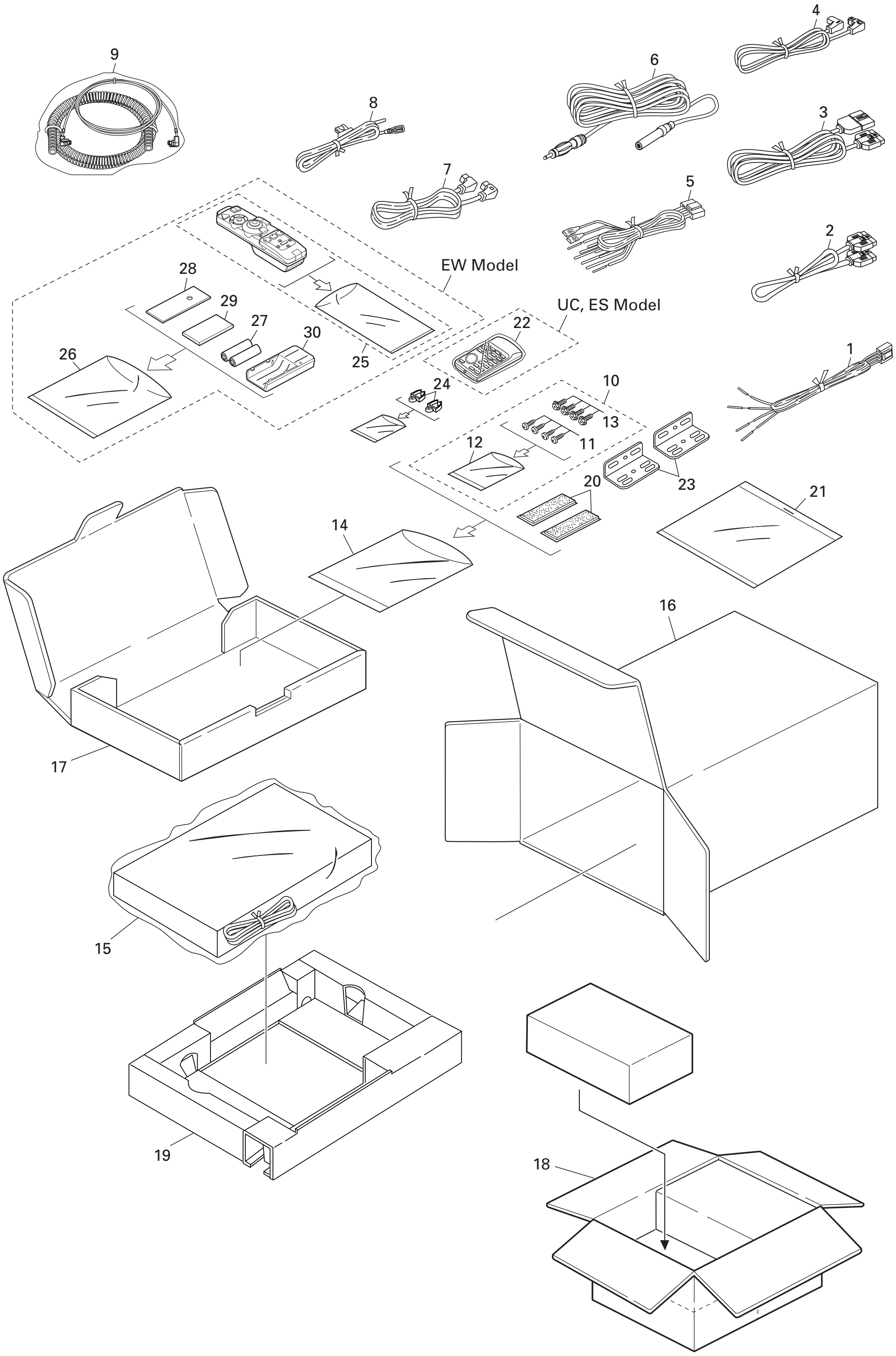
This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely; you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING


4
9
6
8
3
7
5
2
EW Model
28
29
UC, ES Model
27
30
22
26
25
1
24
10
13
11
12
20
23
21
14
16
17
15
18
19

NOTE:

- Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.

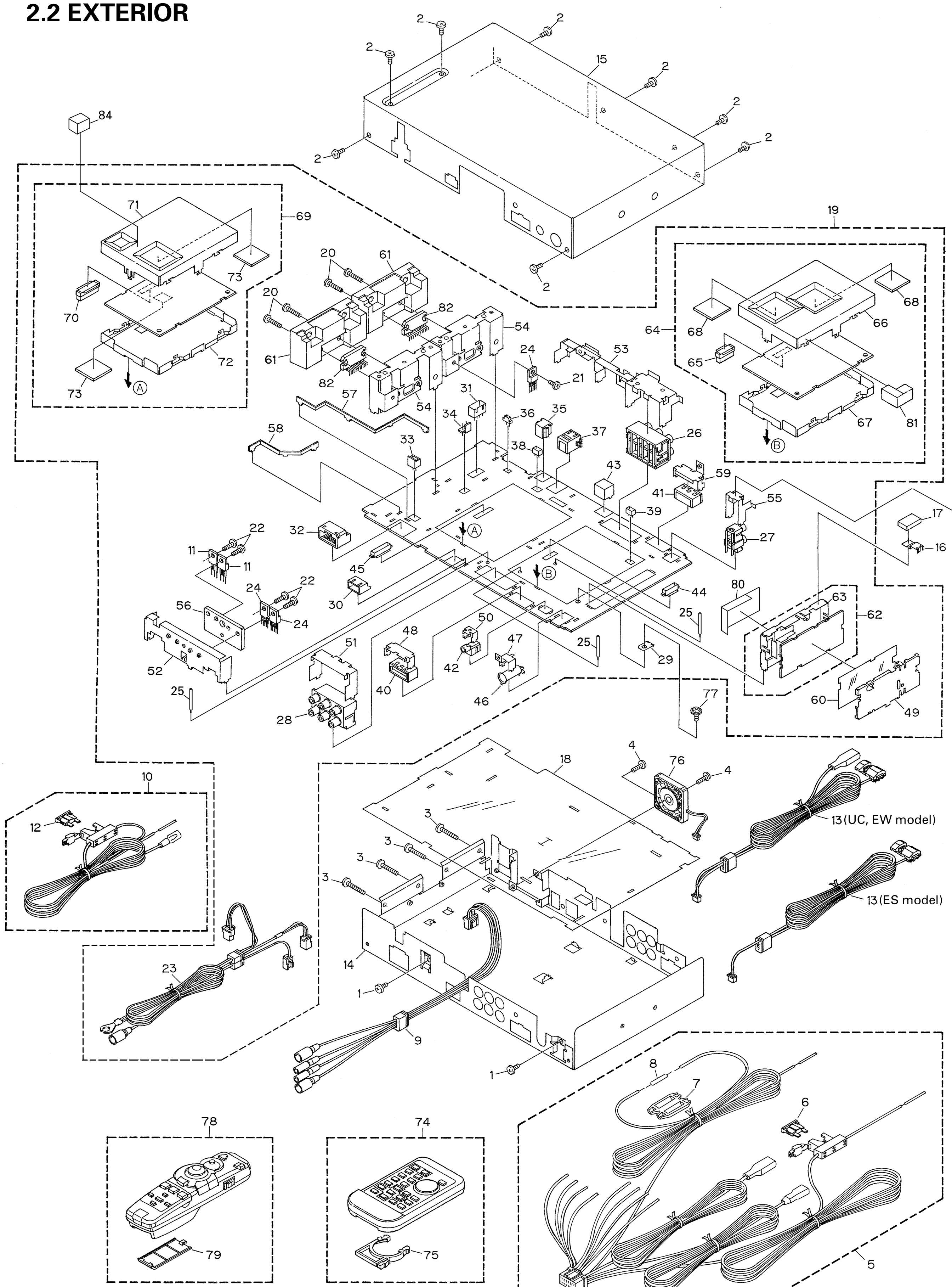
● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No. AVM-P9000R/UC	 AVM-P9000R/EW	 AVM-P9000/ES
	1	Cord Assy	CDE5905	CDE5905	CDE5905
	2	Cord Assy	CDE5906	CDE5906	Not used
	3	Cord Assy	CDE5908	CDE5908	CDE5908
	4	Cord Assy	CDE6016	CDE6016	CDE6016
	5	Cord Assy	CDE6305	CDE6305	CDE6305
	6	Antenna Cord	CDH1265	CDH1265	CDH1265
	7	Cord Assy	CDE6365	CDE6365	CDE6365
	8	Cord Assy	CDE6368	CDE6368	CDE6368
	9	Cable	CDE6366	CDE6366	CDE6366
*	10	Screw Assy	CEA2440	CEA2440	CEA2440
	11	Screw	BNC40P120FZK	BNC40P120FZK	BNC40P120FZK
*	12	Polyethylene Bag	CEG1158	CEG1158	CEG1158
	13	Screw	HMF40P080FZK	HMF40P080FZK	HMF40P080FZK
*	14	Polyethylene Bag	CEG1101	CEG1101	CEG1101
	15	Polyethylene Bag	CEG1181	CEG1057 (Cover)	CEG1057 (Cover)
	16	Carton	CHG4085	CHG4083	CHG4084
	17	Sub Carton	CHG4089	CHG4089	CHG4089
	18	Contain Box	CHL4085	CHL4083	CHL4084
	19	Protector	CHP2280	CHP2280	CHP2280
	20	Fastener	CNM3728	CNM3728	CNM3728
	21-1	Owner's Manual	CRB1591	CRB1585	CRB1593
	21-2	Owner's Manual	CRB1592	CRB1586	CRB1594
	21-3	Owner's Manual	Not used	CRB1587	CRB1595
	21-4	Owner's Manual	Not used	CRB1588	CRB1596
	21-5	Owner's Manual	Not used	CRB1589	CRB1597
	21-6	Owner's Manual	Not used	CRB1590	Not used
*	21-7	Card	ARY1048	Not used	Not used
*	21-8	Warranty Card	Not used	CRY1157	Not used
	21-9	Polyethylene Bag	CEG1116	CEG1116	CEG1116
	22	Remote Control Assy	CXB6029	Not used	CXB6028
	23	Angle	CNB2351	CNB2351	CNB2351
	24	Clamper	CNV1343	CNV1343	CNV1343
	25	Remote Control Main Assy	Not used	CPN1639	Not used
	26	Polyethylene Bag	Not used	CEG1011	Not used
	27	Battery	Not used	CEX1021	Not used
	28	Sheet	Not used	CNM5288	Not used
	29	Sheet	Not used	CNM5472	Not used
	30	Holder	Not used	CNS4502	Not used

● Owner's Manual

Model	Part No.	Language
AVM-P9000R/UC	CRB1591	English
	CRB1592	French
AVM-P9000R/EW	CRB1585	English
	CRB1586	Spanish
	CRB1587	German
	CRB1588	French
	CRB1589	Italian
	CRB1590	Dutch
AVM-P9000/ES	CRB1593	English
	CRB1594	Spanish
	CRB1595	Portuguese(B)
	CRB1596	Chinese
	CRB1597	Arabic

2.2 EXTERIOR


Ⓐ
Ⓑ
Ⓐ
Ⓑ
13(UC, EW model)
13(ES model)

(1) EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BSZ30P060FMC
	2	Screw	BSZ30P060FZK
	3	Screw	BSZ30P200FMC
	4	Screw(M2.6x10)	CBA1147
	5	Cord Assy	CDE6305
	6	Fuse(10A)	CEK1136
	7	Cap	CNS1472
	8	Resistor	RS1/2PMF102J
	9	Cord Assy	CDE6307
	10	Cord Assy	CDE6368
	11	Transistor(Q804,813)	2SD2396
	12	Fuse(4A)	CEK1001
	13	Cord Assy	See Contrast table(2)
	14	Chassis	CNA2292
	15	Case	See Contrast table(2)
	16	Holder	CNC8964
	17	Cushion	CNM7001
	18	Insulator	CNM6988
	19	Tuner Amp Unit	See Contrast table(2)
	20	Screw	BMZ26P160FMC
	21	Screw	BSZ26P060FMC
	22	Screw	BSZ26P100FMC
	23	Cord Assy	CDE6442
	24	IC(IC800,801,802)	BA05ST-V5
	25	Clamper	CEF1007
	26	Pin Jack(CN101)	CKB1037
	27	Pin Jack(CN200)	CKB1045
	28	Pin Jack(CN920)	CKB1046
	29	Terminal(CN402)	CKF1059
	30	Plug(CN202)	CKM1131
	31	Connector(CN900)	CKM1192
	32	Plug(CN800)	CKM1278
	33	Plug(CN802)	CKM1325
	34	Plug(CN803)	CKS-555
	35	Connector(CN201)	CKS2601
	36	Connector(CN860)	CKS3124
	37	Connector(CN160)	CKS3414
	38	Connector(CN801)	CKS3582
	39	Connector(CN260)	CKS3596
	40	Connector(CN350)	CKS3644
	41	Connector(CN1)	See Contrast table(2)
	42	Connector(CN100)	CKS4124
	43	Connector(CN185)	CKS4362
	44	Connector(CN661)	CKS4363
	45	Connector(CN660)	CKS4364
	46	Antenna Jack(CN401)	CKX1056
	47	Holder	CNC4569
	48	Holder	CNC7047
	49	Holder	CNC7533
	50	Holder	CNC8205
	51	Holder	CNC8274
	52	Holder	CNC8819
	53	Holder	CNC8820
	54	Holder	CNC8821
	55	Holder	CNC8826
	56	Heat Sink	CNC8827
	57	Buss Bar	CNC8841
	58	Buss Bar	CNC8842
	59	Holder	See Contrast table(2)
	60	Insulator	CNM5967
	61	Heat Sink	CNR1570
	62	FM/AM Tuner Unit	See Contrast table(2)
	63	Holder	CNC7532
	64	GDC Unit	CWM7146
	65	Connector(CN1601)	CKS4365
	66	Shield	CNC9134
	67	Shield	CNC9135
	68	Sheet	CNM6866
	69	DSP Unit	CWM7147
	70	Connector(CN2701)	CKS4366
	71	Shield	CNC9107
	72	Shield	CNC9108
	73	Sheet	CNM6866
	74	Remote Control Assy	See Contrast table(2)
	75	Cover	See Contrast table(2)
	76	Fan Motor	CXM1154
	77	Screw	ISS26P055FUC
	78	Remote Control Main Assy	See Contrast table(2)
	79	Case	See Contrast table(2)
	80	Sheet	CNM7002
	81	Sheet	CNM7003
	82	IC(IC900,901)	PAL005A
	83	Cushion	CNM7052
	84	Spacer	CNM7053

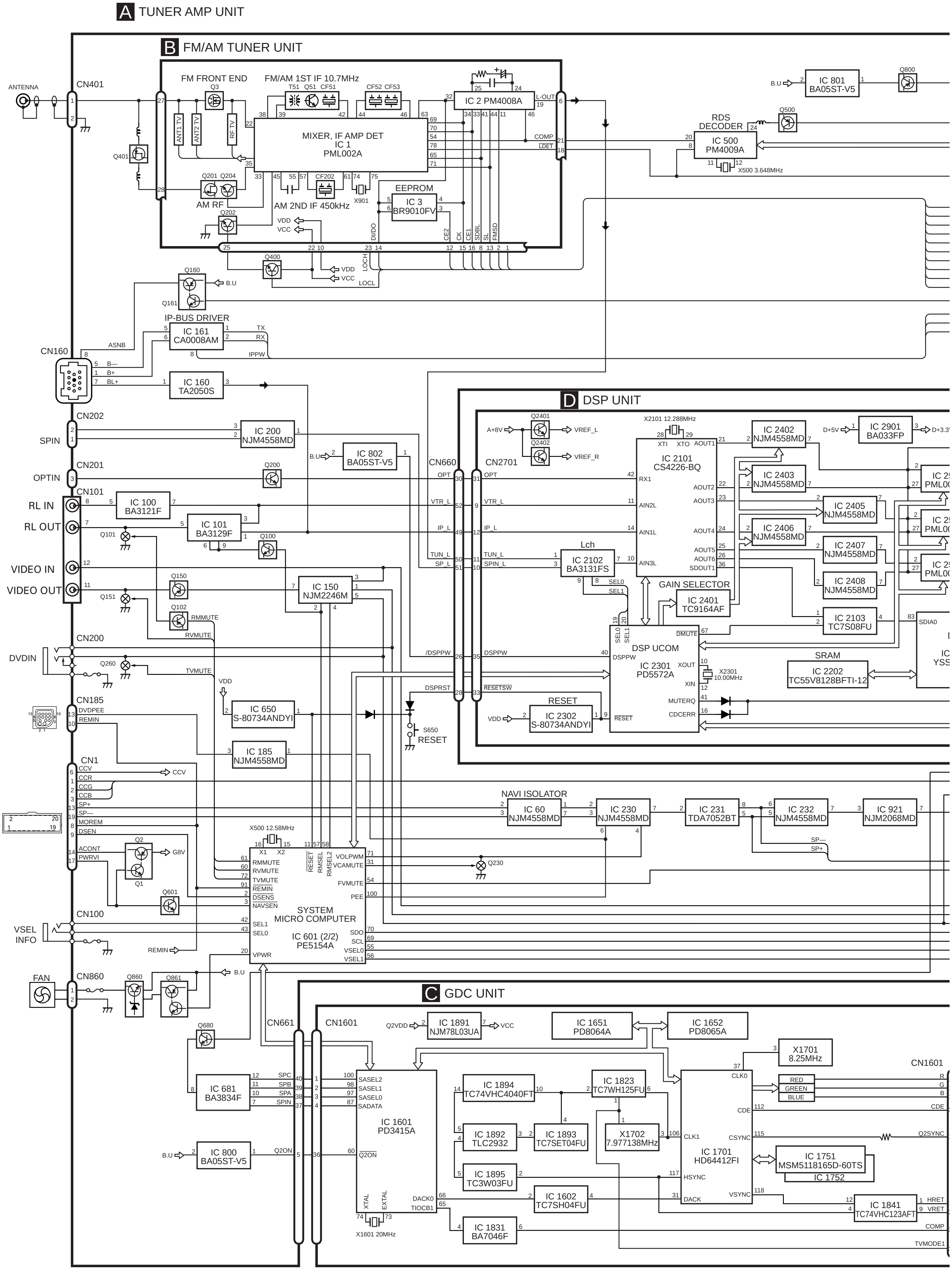
(2) CONTRAST TABLE

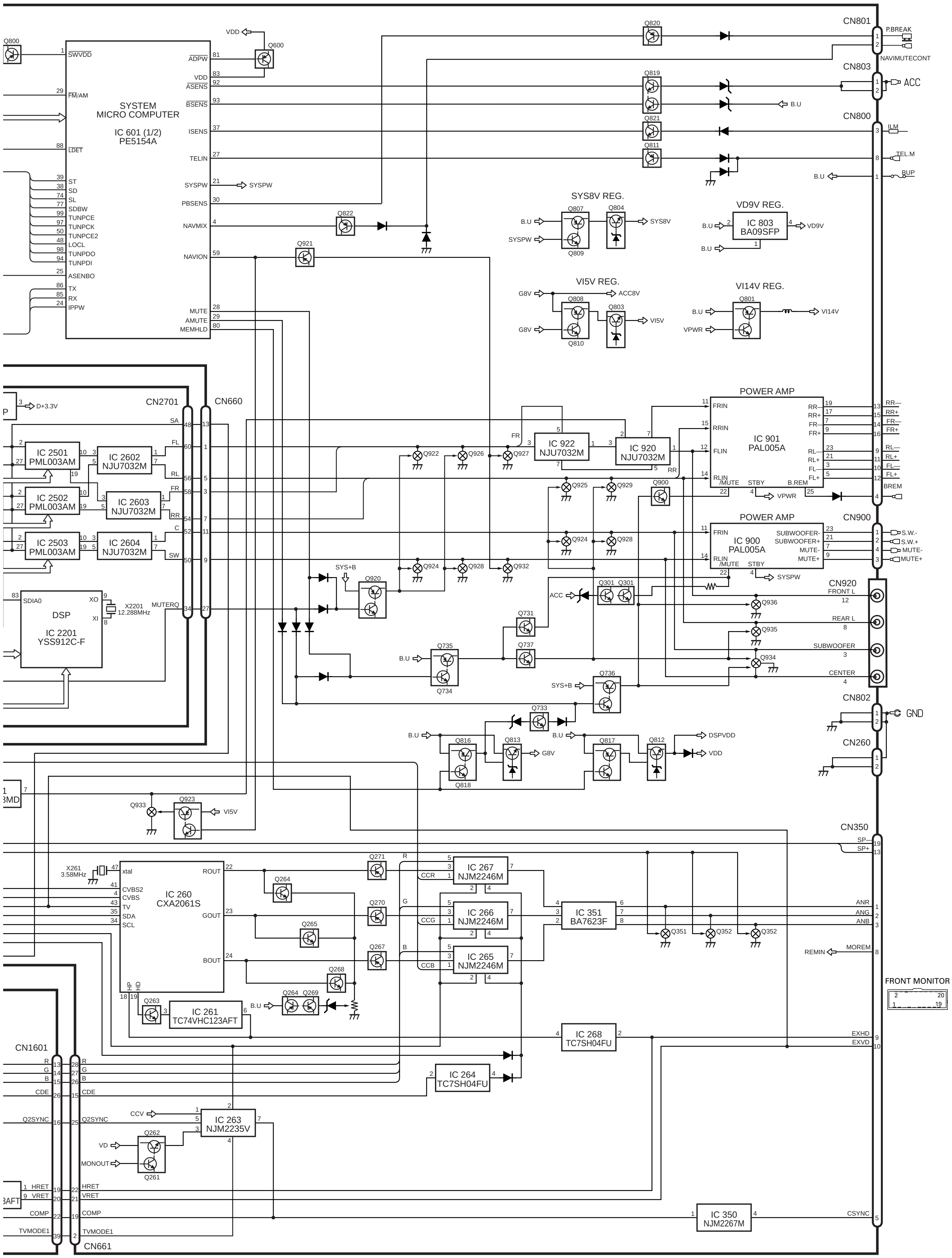
AVM-P9000R/UC, AVM-P9000R/EW and AVM-P9000/ES are constructed the same except for the following:

Mark	No.	Description	Part No.		
			AVM-P9000R/UC	AVM-P9000R/EW	AVM-P9000/ES
	13	Cord Assy	CDE6370	CDE6370	CDE6386
	15	Case	CNB2573	CNB2573	CNB2592
	19	Tuner Amp Unit	CWM7150	CWM7151	CWM7152
	41	Connector(CN1)	CKS3645	CKS3645	Not used
	59	Holder	CNC8963	CNC8963	Not used
	62	FM/AM Tuner Unit	CWE1501	CWE1500	CWE1501
	74	Remote Control Assy	CXB6029	Not used	CXB6028
	75	Cover	CZN5357	Not used	CZN5357
	78	Remote Control Main Assy	Not used	CPN1639	Not used
	79	Case	Not used	CNS6050	Not used

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

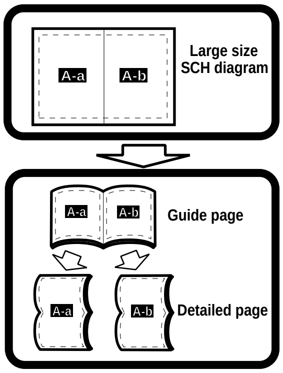
3.1 BLOCK DIAGRAM(AVM-P9000R/UC)


A TUNER AMP UNIT
B FM/AM TUNER UNIT
ANTENNA
CN401
FM FRONT END
Q3
FM/AM 1ST IF 10.7MHz
T51 Q51 CF51
CF52 CF53
IC 2 PM4008A
L-OUT
MIXER, IF AMP DET
IC 1
PML002A
ANT1 TV
ANT2 TV
RF TV
COMP
LDET
Q401
Q201 Q204
AM RF
Q202
CF202
AM 2ND IF 450kHz
X901
EEPROM
IC 3
BR9010FV
VDD
VCC
DI/DO
CE2
CK
CE1
SDBL
SL
FMSD
Q400
LOCH
LOCL
IC 801
BA05ST-V5
Q800
B.U
RDS DECODER
Q500
IC 500
PM4009A
X500 3.648MHz
Q160
Q161
IP-BUS DRIVER
IC 161
CA0008AM
TX
RX
IPPW
ASNB
CN160
B—
B+
BL+
IC 160
TA2050S
D DSP UNIT
CN202
SPIN
IC 200
NJM4558MD
IC 802
BA05ST-V5
CN201
OPTIN
Q200
CN101
RL IN
RL OUT
VIDEO IN
VIDEO OUT
IC 100
BA3121F
IC 101
BA3129F
Q101
Q100
Q150
Q151
Q102
IC 150
NJM2246M
RMMUTE
RVMUTE
CN200
DVDIN
Q260
TVMUTE
VDD
CN185
DVDPEE
REMIN
IC 650
S-80734ANDYI
IC 185
NJM4558MD
S650
RESET
CN660
OPT
VTR_L
IP_L
TUN_L
SP_L
/DSPPW
DSPRST
CN2701
OPT
VTR_L
IP_L
TUN_L
SPIN_L
DSPPW
RESETSW
A+8V
Q2401
Q2402
VREF_L
VREF_R
X2101 12.288MHz
XTI XTO AOUT1
IC 2101
CS4226-BQ
RX1
AIN2L
AIN1L
AIN3L
AOUT2
AOUT3
AOUT4
AOUT5
AOUT6
SDOUT1
IC 2402
NJM4558MD
IC 2403
NJM4558MD
IC 2405
NJM4558MD
IC 2406
NJM4558MD
IC 2407
NJM4558MD
IC 2408
NJM4558MD
D+5V
IC 2901
BA033FP
D+3.3
IC 25
PML00
Lch
IC 2102
BA3131FS
SEL0
SEL1
GAIN SELECTOR
IC 2401
TC9164AF
IC 2103
TC7S08FU
SDIA0
DMUTE
DSP UCOM
IC 2301
PD5572A
DSPPW
XOUT
XIN
X2301 10.00MHz
MUTERQ
CDCERR
SRAM
IC 2202
TC55V8128BFTI-12
IC
YSS
RESET
IC 2302
S-80734ANDYI
CN1
CCV
CCR
CCG
CCB
SP+
SP—
MOREM
DSEN
ACONT
PWRVI
Q2
Q1
G8V
Q601
NAVI ISOLATOR
IC 60
NJM4558MD
IC 230
NJM4558MD
IC 231
TDA7052BT
IC 232
NJM4558MD
IC 921
NJM2068MD
X500 12.58MHz
X1 X2
RESET
RMSEL
RMSEL2
VOLPWM
VCAMUTE
FVMUTE
PEE
Q230
RMMUTE
RVMUTE
TVMUTE
REMIN
DSENS
NAVSEN
SYSTEM MICRO COMPUTER
IC 601 (2/2)
PE5154A
SEL1
SEL0
SDO
SCL
VSEL0
VSEL1
VPWR
CN100
VSEL
INFO
REMIN
FAN
CN860
Q860
Q861
B.U
C GDC UNIT
Q680
CN661
CN1601
Q2VDD
IC 1891
NJM78L03UA
VCC
IC 1651
PD8064A
IC 1652
PD8065A
X1701
8.25MHz
CN1601
IC 681
BA3834F
SPC
SPB
SPA
SPIN
SASEL2
SASEL1
SASEL0
SADATA
IC 1601
PD3415A
Q2ON
IC 800
BA05ST-V5
XTAL
EXTAL
DACK0
TIOCB1
X1601 20MHz
IC 1894
TC74VHC4040FT
IC 1823
TC7WH125FU
IC 1892
TLC2932
IC 1893
TC7SET04FU
X1702
7.977138MHz
IC 1895
TC3W03FU
IC 1602
TC7SH04FU
IC 1831
BA7046F
CLK0
CDE
CLK1
CSYNC
IC 1701
HD64412FI
HSYNC
DACK
VSYNC
RED
GREEN
BLUE
IC 1751
MSM5118165D-60TS
IC 1752
IC 1841
TC74VHC123AFT
R
G
B
CDE
Q2SYNC
HRET
VRET
COMP
TVMODE1
A
B
C
D

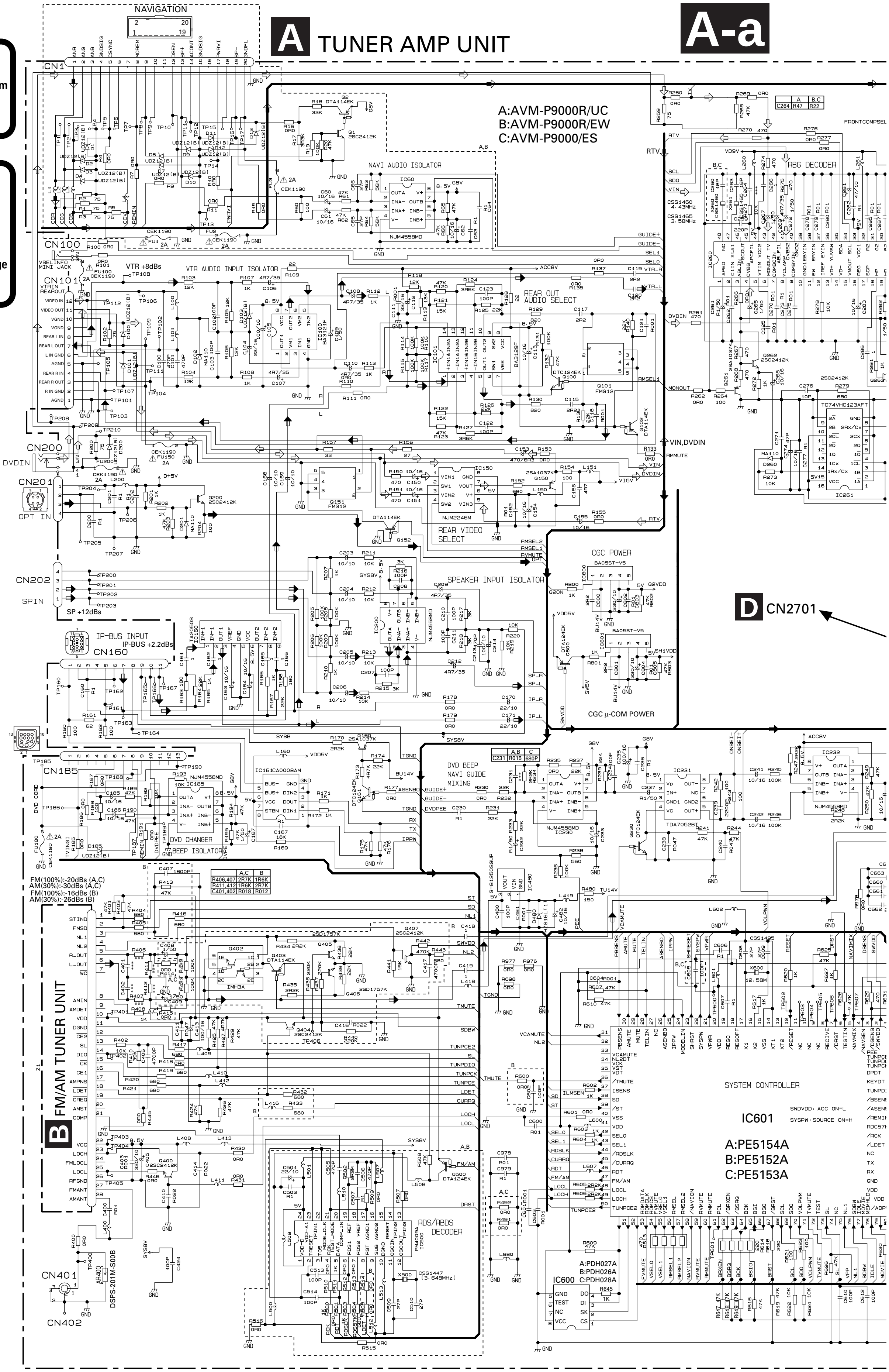

A
B
C
D
SYSTEM MICRO COMPUTER
IC 601 (1/2)
PE5154A
SWVDD
FM/AM
LDET
ST
SD
SL
SDBW
TUNPCE
TUNPCK
TUNPCE2
LOCL
TUNPDO
TUNPDI
ASENBO
TX
RX
IPPW
ADPW
VDD
ASENS
BSENS
ISENS
TELIN
SYSPW
PBSENS
NAVMIX
NAVION
MUTE
AMUTE
MEMHLD
Q800
Q600
Q820
Q819
Q821
Q811
Q822
Q921
CN801
P.BREAK
NAVIMUTECONT
CN803
ACC
B.U
CN800
ILM
TEL.M
BUP
SYS8V REG.
Q807
Q804
Q809
SYS8V
SYSPW
VD9V REG.
IC 803
BA09SFP
VD9V
VI5V REG.
Q808
Q803
Q810
G8V
ACC8V
VI5V
VI14V REG.
Q801
VI14V
VPWR
CN2701
CN660
D+3.3V
IC 2501
PML003AM
IC 2502
PML003AM
IC 2503
PML003AM
IC 2602
NJU7032M
IC 2603
NJU7032M
IC 2604
NJU7032M
SA
FL
RL
FR
RR
C
SW
MUTERQ
DSP
IC 2201
YSS912C-F
SDIA0
XO
XI
X2201
12.288MHz
IC 922
NJU7032M
IC 920
NJU7032M
POWER AMP
IC 901
PAL005A
FRIN
RRIN
FLIN
RLIN
/MUTE
STBY
B.REM
RR–
RR+
FR–
FR+
RL–
RL+
FL–
FL+
BREM
Q922
Q926
Q927
Q925
Q929
Q900
IC 900
PAL005A
SUBWOOFER-
SUBWOOFER+
MUTE-
MUTE+
CN900
S.W.-
S.W.+
Q924
Q928
Q932
SYS+B
Q920
Q301
CN920
FRONT L
REAR L
SUBWOOFER
CENTER
Q936
Q935
Q934
Q731
Q735
Q737
Q734
Q736
Q733
CN802
GND
Q816
Q813
Q817
Q812
Q818
DSPVDD
VDD
CN260
BMD
Q933
Q923
CN350
SP–
SP+
X261
3.58MHz
IC 260
CXA2061S
xtal
CVBS2
CVBS
TV
SDA
SCL
ROUT
GOUT
BOUT
HP
HD
Q271
Q264
Q270
Q265
Q267
Q268
Q263
Q269
IC 267
NJM2246M
IC 266
NJM2246M
IC 265
NJM2246M
CCR
CCG
CCB
IC 351
BA7623F
Q351
Q352
ANR
ANG
ANB
REMIN
MOREM
FRONT MONITOR
IC 261
TC74VHC123AFT
IC 268
TC7SH04FU
EXHD
EXVD
IC 264
TC7SH04FU
CN1601
R
G
B
CDE
Q2SYNC
CCV
IC 263
NJM2235V
Q262
Q261
VD
MONOUT
BAFT
HRET
VRET
COMP
TVMODE1
CN661
IC 350
NJM2267M
CSYNC

3.2 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".

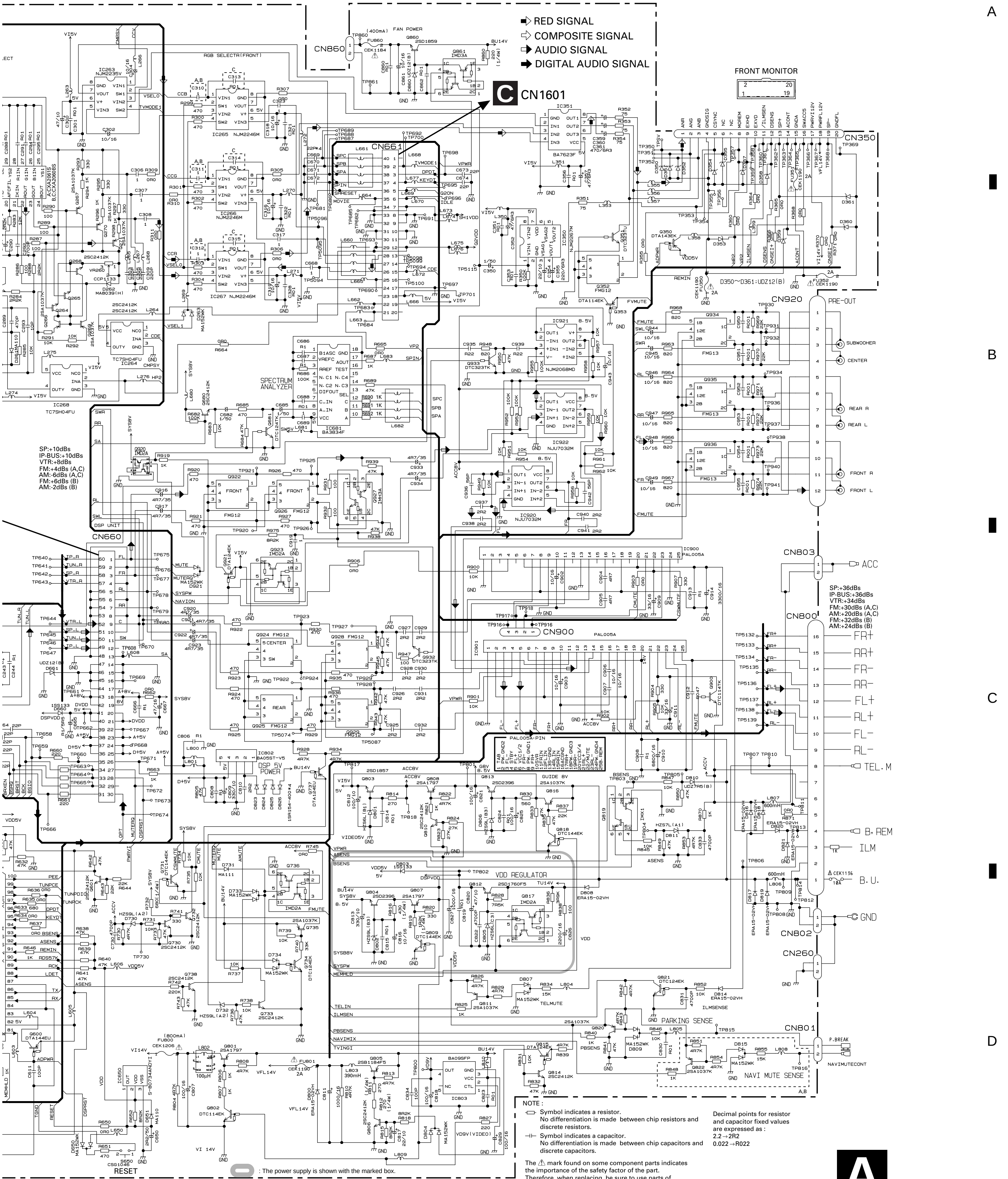


A-a
A-b
Large size SCH diagram
Guide page
Detailed page



A
TUNER AMP UNIT
A-a
A:AVM-P9000R/UC
B:AVM-P9000R/EW
C:AVM-P9000/ES
NAVIGATION
CN1
NAVI AUDIO ISOLATOR
IC60
NJM4558MD
CN100
VSEL INFO
MINI JACK
CN101
VTR +8dBs
VTR AUDIO INPUT ISOLATOR
REAR OUT AUDIO SELECT
RBG DECODER
IC260
CSS1460 4.43MHz
CSS1465 3.58MHz
FRONTCOMPSEL
TC74VHC123AFT
IC261
CN200
DVDIN
CN201
OPT IN
REAR VIDEO SELECT
IC150
NJM2246M
CGC POWER
BA05ST-V5
CN202
SPIN
SP +12dBs
SPEAKER INPUT ISOLATOR
IC200
NJM4558MD
D
CN2701
CGC µ-COM POWER
IP-BUS INPUT
IP-BUS +2.2dBs
CN160
CN185
IC185
NJM4558MD
IC161 CA0008AM
DVD CHANGER BEEP ISOLATOR
DVD BEEP NAVI GUIDE MIXING
IC230
IC231
TDA7052BT
IC232
FM(100%):-20dBs (A,C)
AM(30%):-30dBs (A,C)
FM(100%):-16dBs (B)
AM(30%):-26dBs (B)
B
FM/AM TUNER UNIT
CN401
CN402
DSPS-201M-S00B
RDS/RBDS DECODER
IC500
CSS1447 (3.648MHz)
IC480
SYSTEM CONTROLLER
IC601
A:PE5154A
B:PE5152A
C:PE5153A
IC600
A:PDH027A
B:PDH026A
C:PDH028A
SWDVDD: ACC ON=L
SYSPW: SOURCE ON=H
X600 12.58M

A-b


RED SIGNAL
COMPOSITE SIGNAL
AUDIO SIGNAL
DIGITAL AUDIO SIGNAL
C CN1601
CN860
FAN POWER
FRONT MONITOR
CN350
CN661
CN660
CN920
PRE-OUT
SUBWOOFER
CENTER
REAR R
REAR L
FRONT R
FRONT L
SPECTRUM ANALYZER
DSP UNIT
SP:+10dBs
IP-BUS:+10dBs
VTR:+8dBs
FM:+4dBs (A,C)
AM:-6dBs (A,C)
FM:+6dBs (B)
AM:-2dBs (B)
CN803
ACC
CN800
SP:+36dBs
IP-BUS:+36dBs
VTR:+34dBs
FM:+30dBs (A,C)
AM:+20dBs (A,C)
FM:+32dBs (B)
AM:+24dBs (B)
CN900
PAL005A PIN
FR+
RR+
FR−
RR−
FL+
RL+
FL−
RL−
TEL.M
B.REM
ILM
B.U.
GND
CN802
CN260
CN801
P.BREAK
NAVIMUTECONT
PARKING SENSE
NAVI MUTE SENSE
VDD REGULATOR
DSP 5V POWER
IC263 NJM2235V
IC265 NJM2246M
IC266 NJM2246M
IC267 NJM2246M
IC264 TC7SH04FU
IC268 TC7SH04FU
IC351 BA7623F
IC350 NJM2267M
IC921 NJM2068MD
IC922 NJU7032M
IC920 NJU7032M
IC681 BA3834F
IC900 PAL005A
IC802 BA05ST-V5
IC803 BA09SFP
IC650 S-80734ANDY
RESET

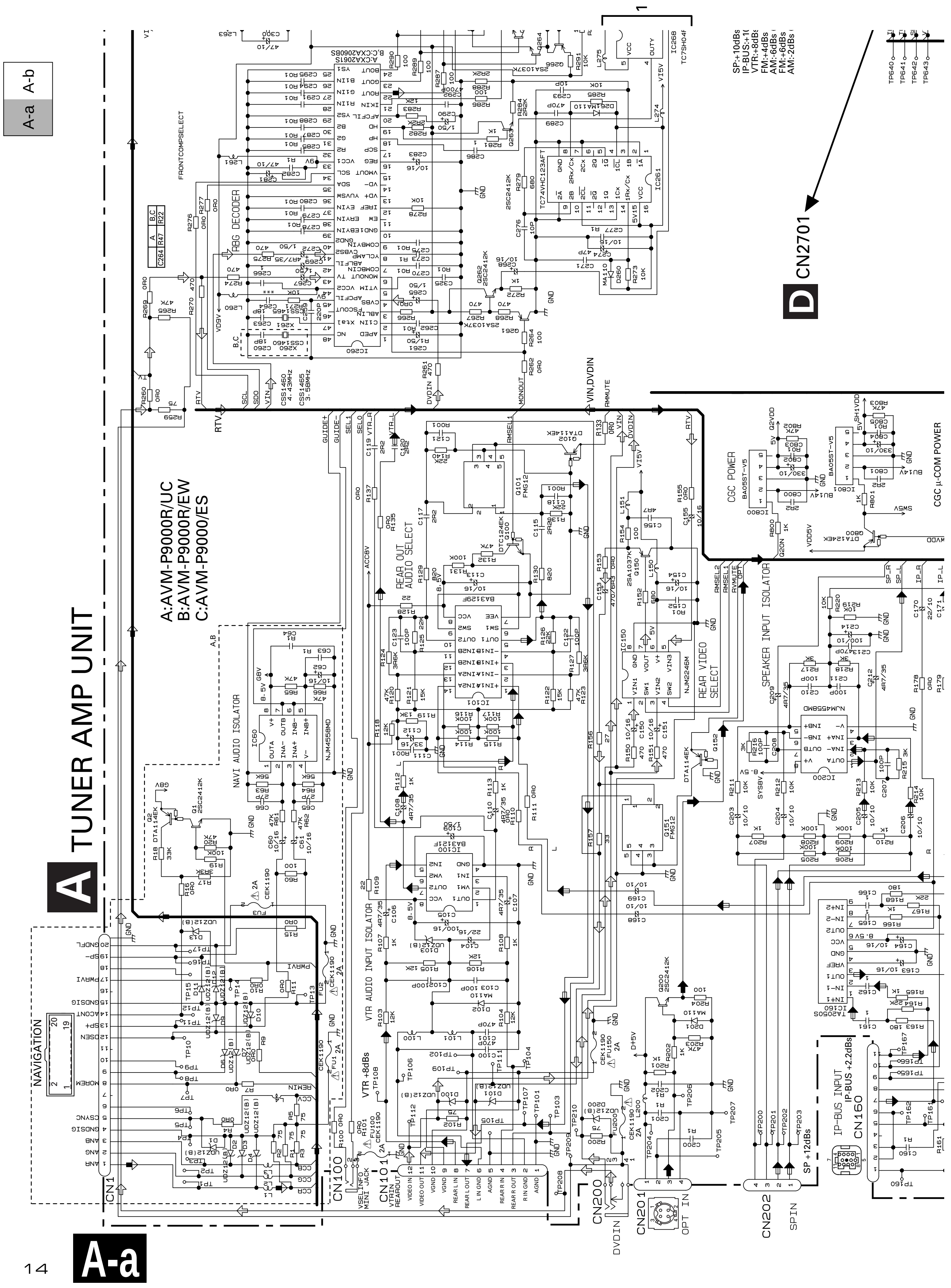
: The power supply is shown with the marked box.

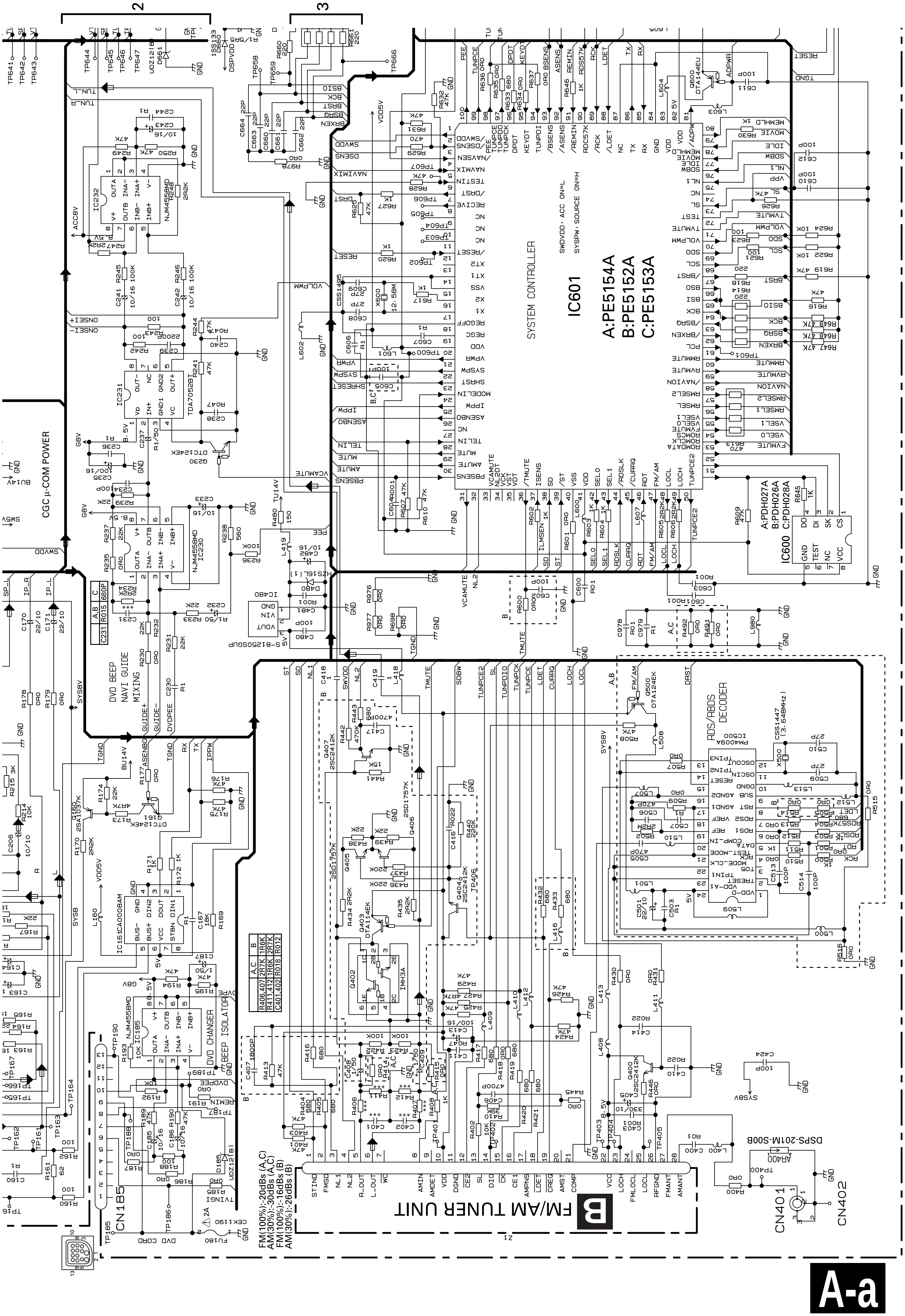
NOTE :
- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

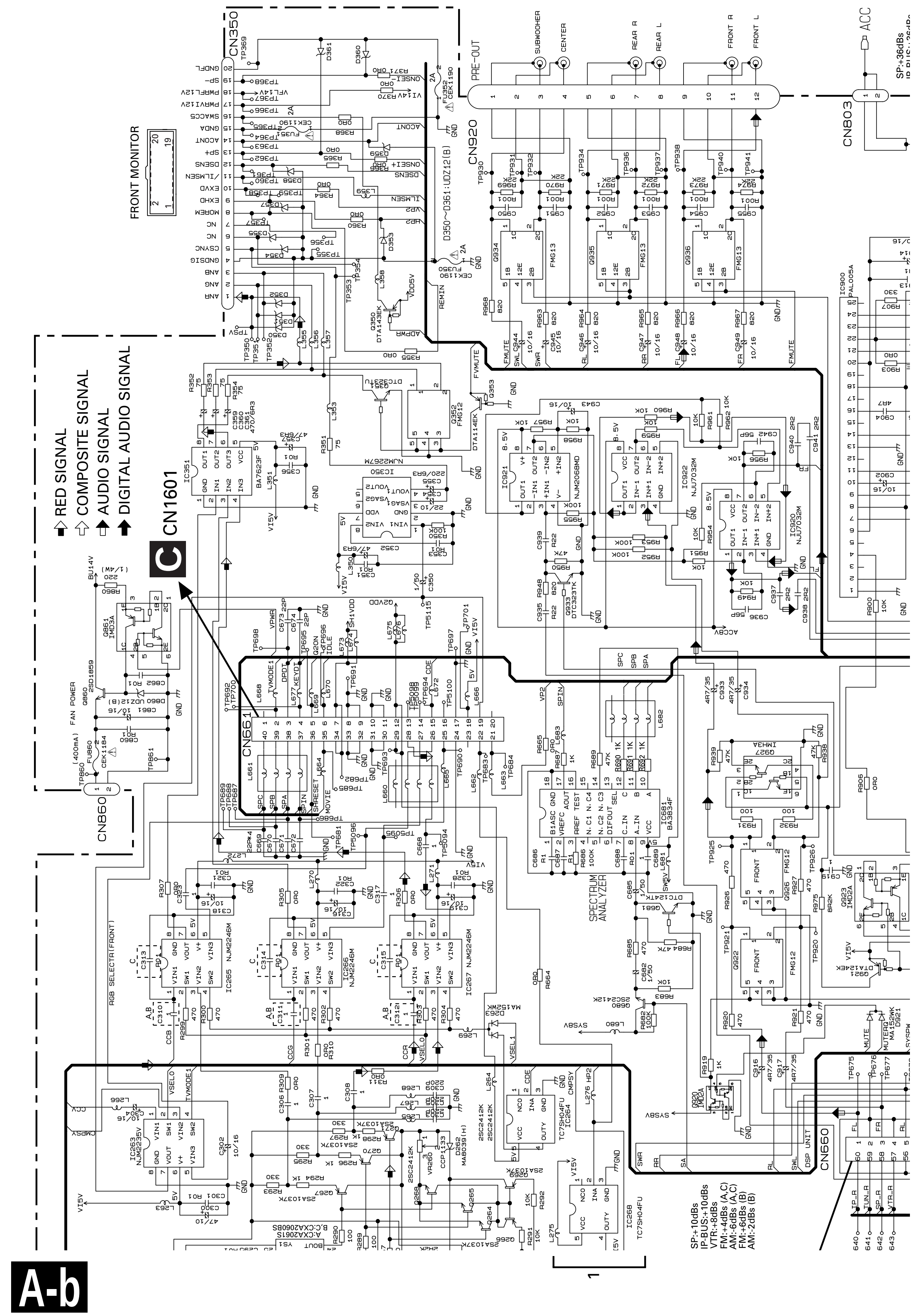
Decimal points for resistor and capacitor fixed values are expressed as :
2.2→2R2
0.022→R022

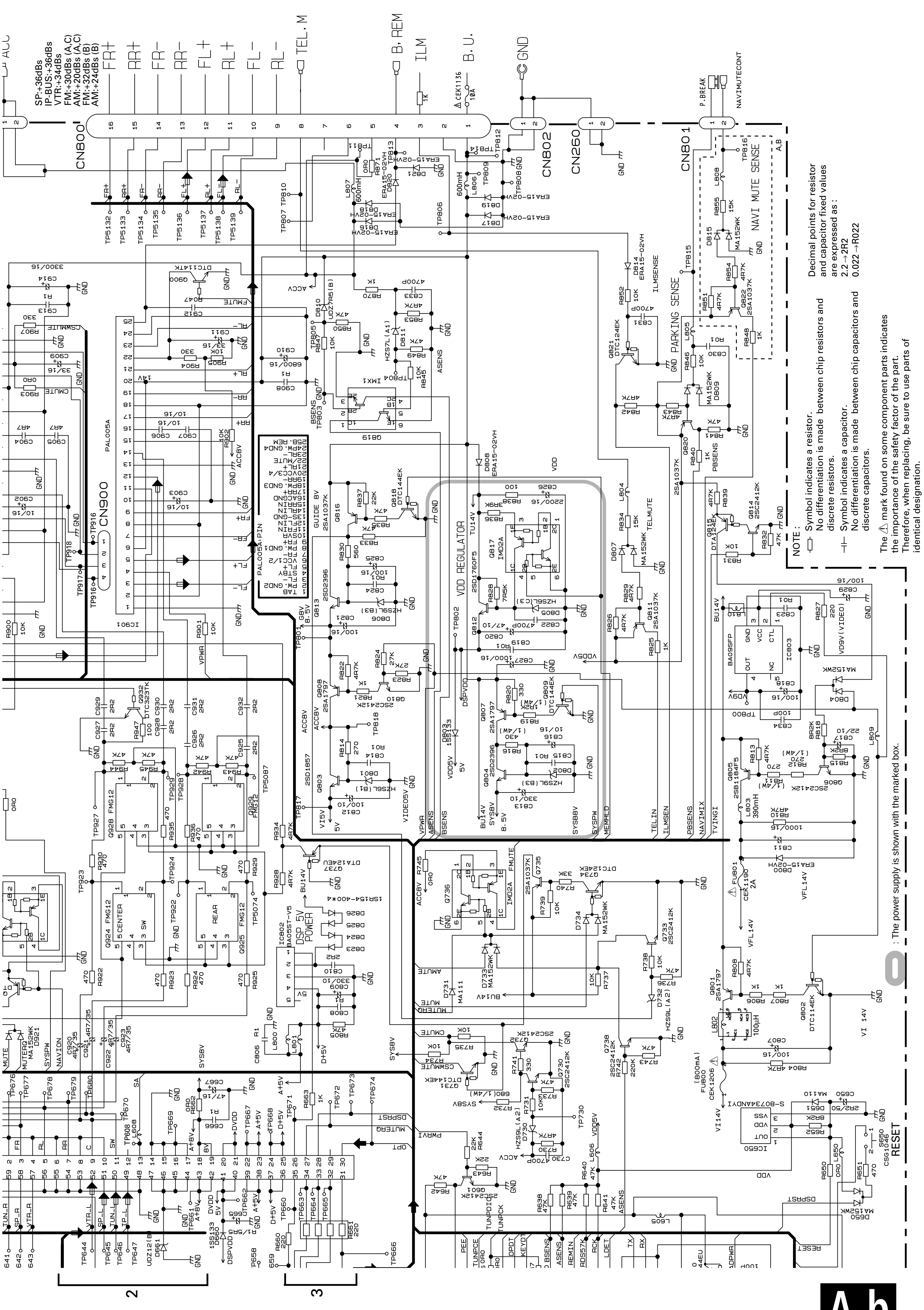
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

A


A TUNER AMP UNIT
A:AVM-P9000R/UC
B:AVM-P9000R/EW
C:AVM-P9000/ES
D CN2701
A-a
A-b
RGB DECODER
IC260
A:CXA2061S
B,C:CXA2060BS
IC261 TC74VHC123AFT
IC268 TC7SH04F
REAR OUT AUDIO SELECT
IC101 BA3126F
NAVI AUDIO ISOLATOR
IC60 NJM4558MD
VTR AUDIO INPUT ISOLATOR
IC100 BA3121F
REAR VIDEO SELECT
IC150 NJM2246M
SPEAKER INPUT ISOLATOR
IC200 NJM4558MD
IC160 TA2050S
CGC POWER
IC800 BA05ST-V5
CGC µ-COM POWER
IC801 BA05ST-V5
NAVIGATION
IP-BUS INPUT
IP-BUS +2.2dBs
CN160
CN1
CN100
VSEL INFO MINI JACK
CN101
VTR IN REAR OUT
CN200
DVDIN
CN201
OPT IN
CN202
SPIN
VTR +8dBs
SP +12dBs
SP:+10dBs
IP-BUS:+1(
VTR:+8dBs
FM:+4dBs
AM:-6dBs
FM:+6dBs
AM:-2dBs
FRONTCOMPSELECT
RTV
VIN,DVDIN
RMMUTE
CSS1460 4.43MHz
CSS1465 3.58MHz
FU1 CEK1190 2A
FU2 CEK1190 2A
FU3 CEK1190 2A
FU100 CEK1190 2A
FU200 CEK1190 2A
FU150 CEK1190 2A


IC601
A:PE5154A
B:PE5152A
C:PE5153A
SYSTEM CONTROLLER
SWDVDD: ACC ON=L
SYSPW: SOURCE ON=H
IC600
A:PDH027A
B:PDH026A
C:PDH028A
RDS/RBDS DECODER
IC500 PM4009A
CSS1447 (3.648MHz)
CGC μ-COM POWER
DVD BEEP
NAVI GUIDE
MIXING
DVD CHANGER
BEEP ISOLATOR
IC230 NJM4558MD
IC231 TDA7052BT
IC232 NJM4558MD
IC185 NJM4558MD
IC161 CA0008AM
IC480 S-81250SGUP
Q402 IMH3A
Q403 DTA114EK
Q404 2SC2412K
Q405 2SD1757K
Q406 2SD1757K
Q407 2SC2412K
Q500 DTA124EK
Q600 DTA114EU
X600 12.58M
CSS1495
B FM/AM TUNER UNIT
FM(100%):-20dBs (A,C)
AM(30%):-30dBs (A,C)
FM(100%):-16dBs (B)
AM(30%):-26dBs (B)
CN185
DVD CORD
CN401
CN402
DSPS-201M-S00B
AR400
FU180
2A
CEK1190
A,B C
C231 R015 680P
A,C B
R406,407 2R7K 1R6K
R411,412 1R6K 2R7K
C401,402 R018 R012


A-a
A-b
FRONT MONITOR
CN350
PRE-OUT
SUBWOOFER
CENTER
REAR R
REAR L
FRONT R
FRONT L
ACC
CN920
CN803
RED SIGNAL
COMPOSITE SIGNAL
AUDIO SIGNAL
DIGITAL AUDIO SIGNAL
C
CN1601
CN661
CN860
FAN POWER
SPECTRUM ANALYZER
RGB SELECTR(FRONT)
IC351 BA7623F
IC350 NJM2267M
IC921 NJM2068MD
IC922 NJU7032M
IC920 NJU7032M
IC900 PAL005A
IC681 BA3834F
IC265 NJM2246M
IC266 NJM2246M
IC267 NJM2246M
IC263 NJM2235V
IC264 TC7SH04FU
IC268 TC7SH04FU
CN660
DSP UNIT
SP:+10dBs
IP-BUS:+10dBs
VTR:+8dBs
FM:+4dBs (A,C)
AM:-6dBs (A,C)
FM:+6dBs (B)
AM:-2dBs (B)


CN800
CN802
CN260
CN801
CN900
IC901
VDD REGULATOR
DSP 5V POWER
NAVI MUTE SENSE
PARKING SENSE
RESET
SP:+36dBs
IP-BUS:+36dBs
VTR:+34dBs
FM:+30dBs (A,C)
AM:+20dBs (A,C)
FM:+32dBs (B)
AM:+24dBs (B)
TEL.M
B.REM
ILM
B.U.
GND

NOTE :

—▭— Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

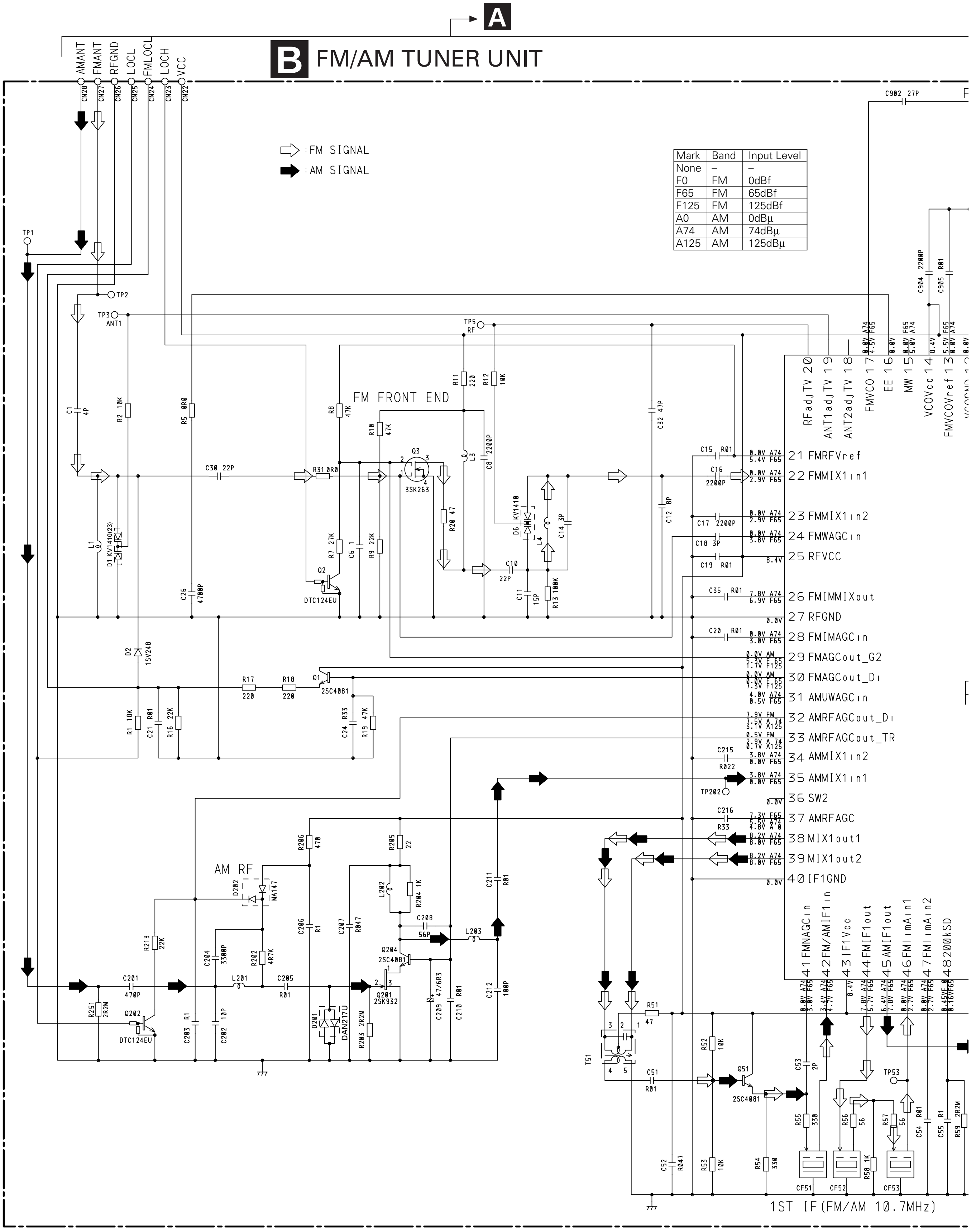
—||— Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

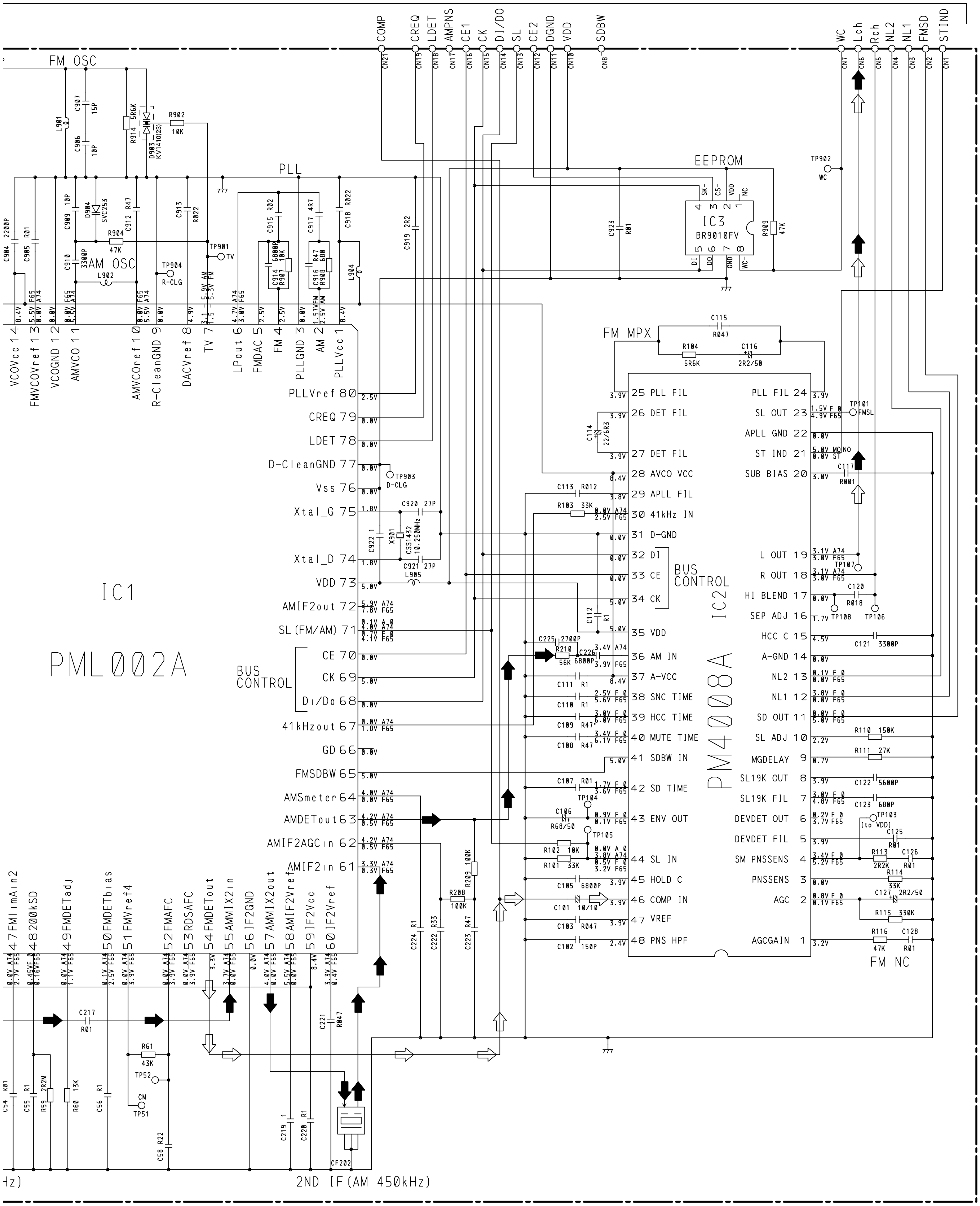
Decimal points for resistor and capacitor fixed values are expressed as :
2.2 → 2R2
0.022 → R022

: The power supply is shown with the marked box.

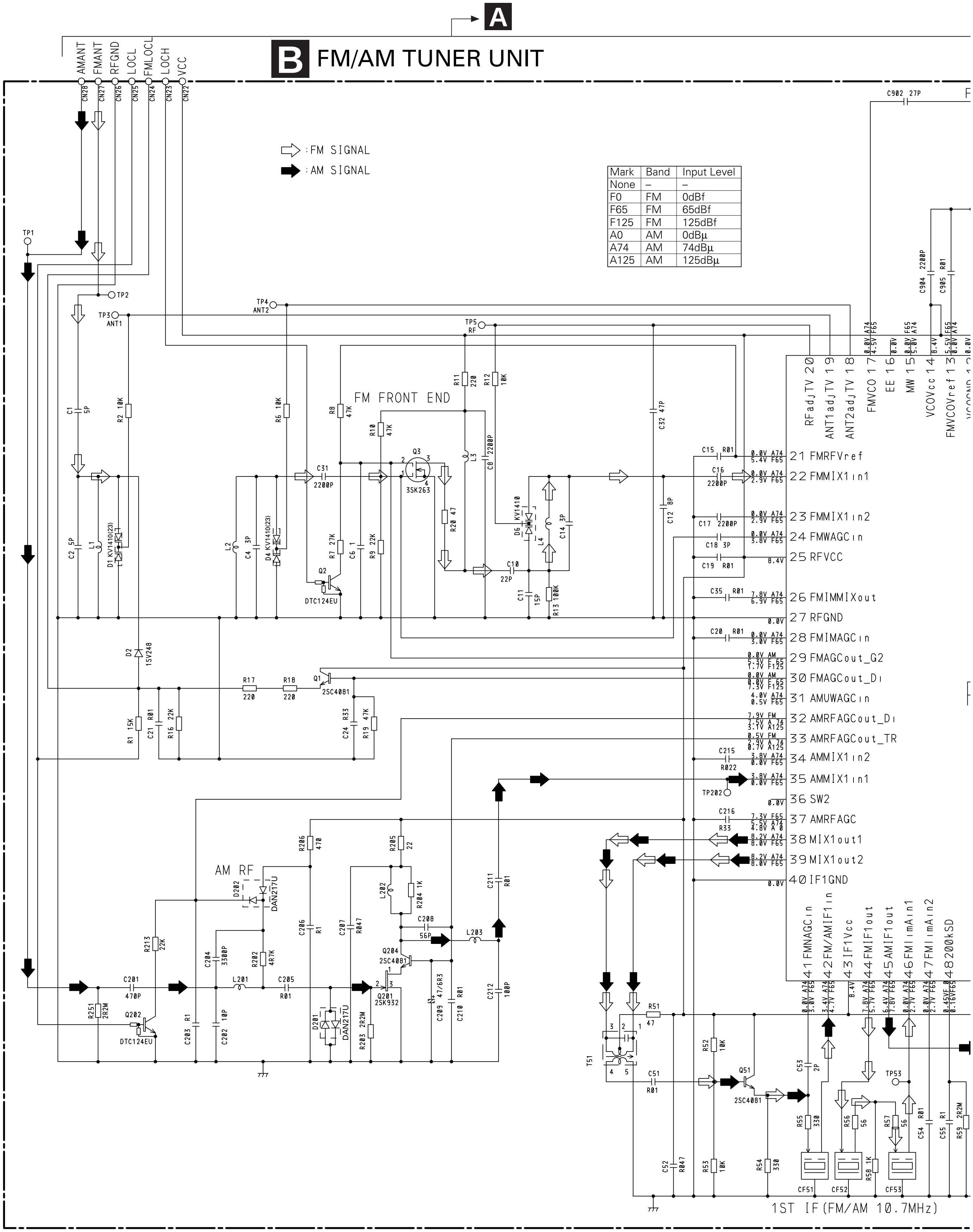
3.3 FM/AM TUNER UNIT(AVM-P9000R/UC, AVM-P9000/ES)


A
B FM/AM TUNER UNIT
AMANT
FMANT
RFGND
LOCL
FMLOCL
LOCH
VCC
CN28
CN27
CN26
CN25
CN24
CN23
CN22
:FM SIGNAL
:AM SIGNAL
TP1
TP2
TP3
ANT1
TP5
RF
FM FRONT END
AM RF
C902 27P
C904 2200P
C905 R01
C1 4P
R2 10K
R5 0R0
C30 22P
R31 0R0
R8 47K
R10 47K
R11 220
R12 10K
L3
C8 2200P
Q3
3SK263
R20 47
C32 47P
C12 8P
D6 KV1410
L4
C14 3P
C10 22P
C11 15P
R13 100K
L1
D1 KV1410(23)
C26 4700P
R7 27K
C6 1
R9 22K
Q2
DTC124EU
D2
1SV248
R17 220
R18 220
Q1
2SC4081
R1 10K
C21 R01
R16 22K
C24 R33
R19 47K
C15 R01
C16 2200P
C17 2200P
C18 3P
C19 R01
C35 R01
C20 R01
C215
R022
TP202
C216
R33
R206 470
R205 22
L202
R204 1K
D202
MA147
C206 R1
C207 R047
C208 56P
L203
C211 R01
Q204
2SC4081
R213 22K
C204 3300P
R202 4R7K
C201 470P
L201
C205 R01
Q201
2SK932
C209 47/6R3
C210 R01
C212 100P
R251 2R2M
Q202
DTC124EU
C203 R1
C202 10P
D201
DAN217U
R203 2R2M
T51
R51 47
C51 R01
Q51
2SC4081
R52 10K
R53 10K
C52 R047
R54 330
C53 2P
R55 330
R56 56
R57 56
R58 1K
C54 R01
C55 R1
R59 2R2M
TP53
CF51
CF52
CF53
1ST IF(FM/AM 10.7MHz)
RFadjTV 20
ANT1adjTV 19
ANT2adjTV 18
FMVCO 17
EE 16
MW 15
VCOVcc 14
FMVCOVref 13
21 FMRFVref
22 FMMIX1in1
23 FMMIX1in2
24 FMWAGCin
25 RFVCC
26 FMIMMIXout
27 RFGND
28 FMIMAGCin
29 FMAGCout_G2
30 FMAGCout_D1
31 AMUWAGCin
32 AMRFAGCout_D1
33 AMRFAGCout_TR
34 AMMIX1in2
35 AMMIX1in1
36 SW2
37 AMRFAGC
38 MIX1out1
39 MIX1out2
40 IF1GND
41 FMNAGCin
42 FM/AMIF1in
43 IF1Vcc
44 FMIF1out
45 AMIF1out
46 FMIimAin1
47 FMIimAin2
48 200kSD
0.0V A74
5.4V F65
0.0V A74
2.9V F65
0.0V A74
3.8V F65
8.4V
7.8V A74
6.9V F65
0.0V
0.0V A74
3.8V F65
0.0V AM
5.3V F65
1.7V F125
4.0V A74
0.5V F65
7.9V FM
3.1V A125
0.5V FM
3.8V A74
0.0V F65
7.3V F65
4.8V A0
8.2V A74
8.0V F65

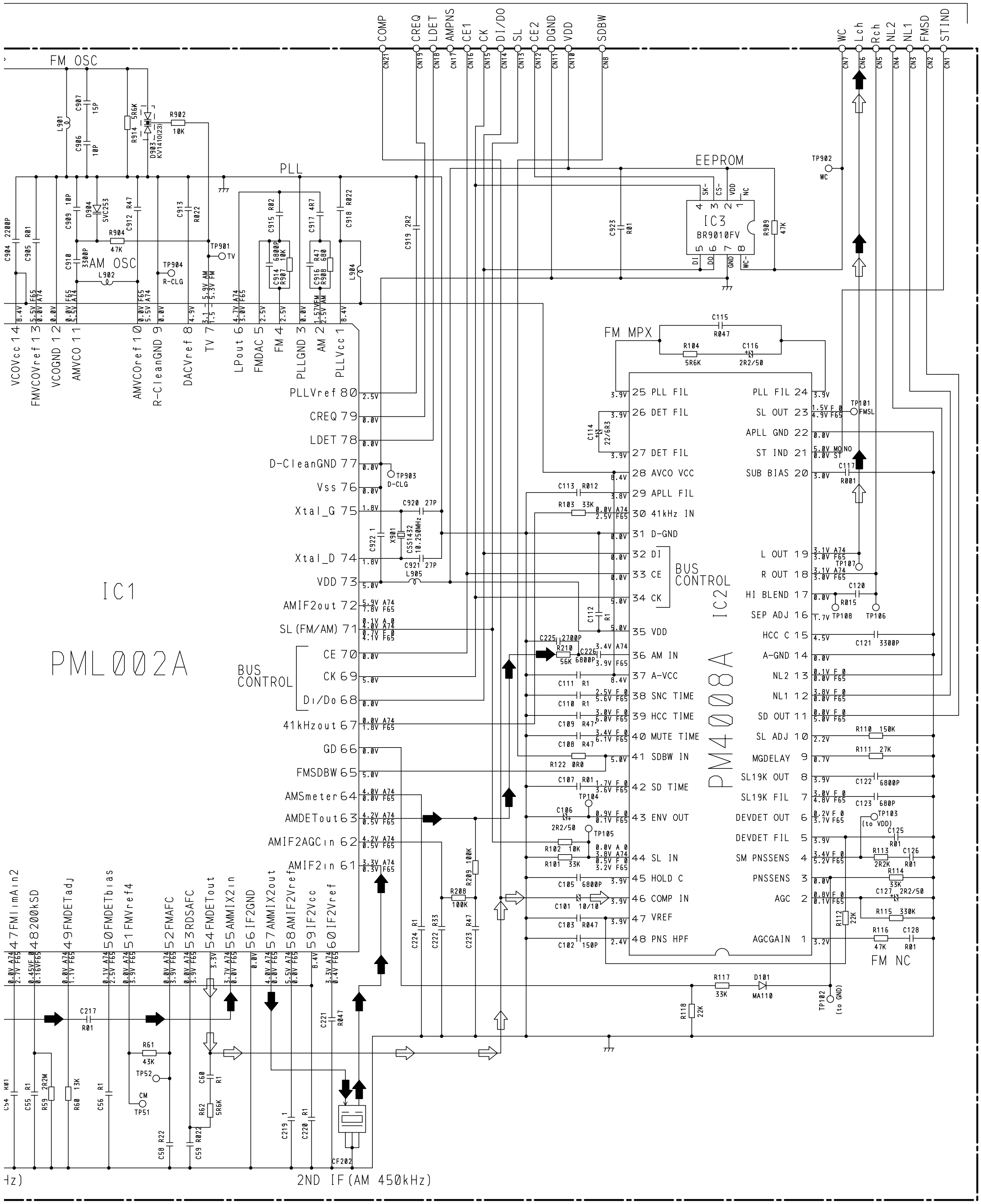
Mark	Band	Input Level
None	–	–
F0	FM	0dBf
F65	FM	65dBf
F125	FM	125dBf
A0	AM	0dBμ
A74	AM	74dBμ
A125	AM	125dBμ


A
B
C
D
COMP
CREQ
LDET
AMPNS
CE1
CK
DI/DO
SL
CE2
DGND
VDD
SDBW
WC
Lch
Rch
NL2
NL1
FMSD
STIND
FM OSC
PLL
AM OSC
EEPROM
IC3
BR9010FV
TP902
TP901
TP904
R-CLG
TP903
D-CLG
X901
CSS1432
10.250MHz
L905
IC1
PML002A
BUS CONTROL
VCOVcc 14
FMVCOVref 13
VCOGND 12
AMVCO 11
AMVCOref 10
R-CleanGND 9
DACVref 8
TV 7
LPout 6
FMDAC 5
FM 4
PLLGND 3
AM 2
PLLVcc 1
PLLVref 80
CREQ 79
LDET 78
D-CleanGND 77
Vss 76
Xtal_G 75
Xtal_D 74
VDD 73
AMIF2out 72
SL (FM/AM) 71
CE 70
CK 69
DI/DO 68
41kHzout 67
GD 66
FMSDBW 65
AMSmeter 64
AMDETout 63
AMIF2AGCin 62
AMIF2in 61
47 FMlimAin2
48 200kSD
49 FMDETadj
50 FMDETbias
51 FMVref4
52 FMAFC
53 RDSAFC
54 FMDETout
55 AMMIX2in
56 IF2GND
57 AMMIX2out
58 AMIF2Vref
59 IF2Vcc
60 IF2Vref
FM MPX
IC2
PM4008A
25 PLL FIL
26 DET FIL
27 DET FIL
28 AVCO VCC
29 APLL FIL
30 41kHz IN
31 D-GND
32 DI
33 CE
34 CK
35 VDD
36 AM IN
37 A-VCC
38 SNC TIME
39 HCC TIME
40 MUTE TIME
41 SDBW IN
42 SD TIME
43 ENV OUT
44 SL IN
45 HOLD C
46 COMP IN
47 VREF
48 PNS HPF
PLL FIL 24
SL OUT 23
APLL GND 22
ST IND 21
SUB BIAS 20
L OUT 19
R OUT 18
HI BLEND 17
SEP ADJ 16
HCC C 15
A-GND 14
NL2 13
NL1 12
SD OUT 11
SL ADJ 10
MGDELAY 9
SL19K OUT 8
SL19K FIL 7
DEVDET OUT 6
DEVDET FIL 5
SM PNSSENS 4
PNSSENS 3
AGC 2
AGCGAIN 1
TP101 FMSL
TP107
TP108
TP106
TP103 (to VDD)
TP104
TP105
TP52
TP51
CM
CF202
FM NC
2ND IF (AM 450kHz)

3.4 FM/AM TUNER UNIT(AVM-P9000R/EW)

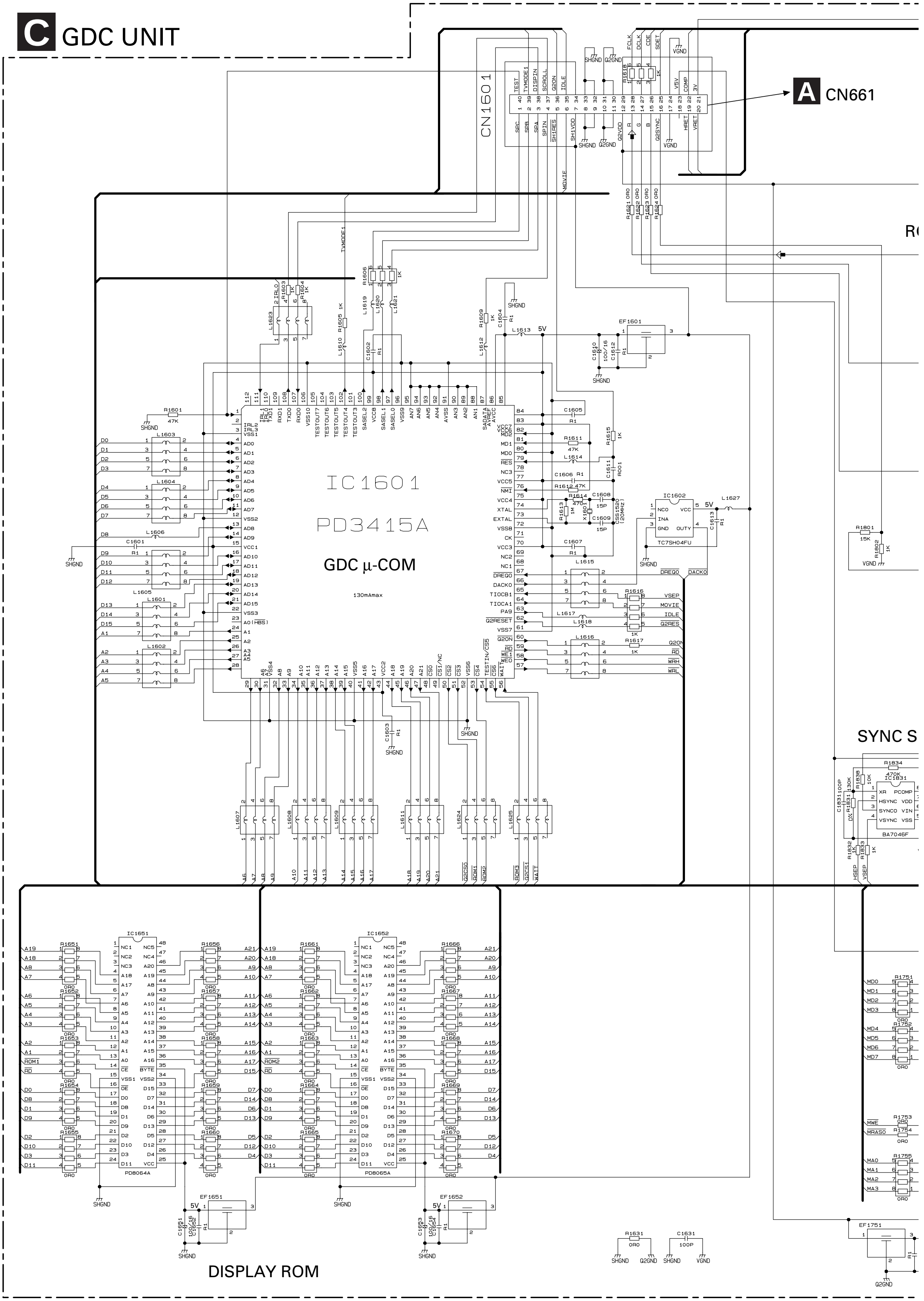

A
B FM/AM TUNER UNIT
AMANT
FMANT
RFGND
LOCL
FMLOCL
LOCH
VCC
CN28
CN27
CN26
CN25
CN24
CN23
CN22
:FM SIGNAL
:AM SIGNAL
TP1
TP2
TP3 ANT1
TP4 ANT2
TP5 RF
FM FRONT END
AM RF
3SK263
DTC124EU
2SC4081
2SK932
DAN217U
KV1410
1SV248
RFadjTV 20
ANT1adjTV 19
ANT2adjTV 18
FMVCO 17
EE 16
MW 15
VCOVcc 14
FMVCOVref 13
21 FMRFVref
22 FMMIX1in1
23 FMMIX1in2
24 FMWAGCin
25 RFVCC
26 FMIMMIXout
27 RFGND
28 FMIMAGCin
29 FMAGCout_G2
30 FMAGCout_Di
31 AMUWAGCin
32 AMRFAGCout_Di
33 AMRFAGCout_TR
34 AMMIX1in2
35 AMMIX1in1
36 SW2
37 AMRFAGC
38 MIX1out1
39 MIX1out2
40 IF1GND
41 FMNAGCin
42 FM/AMIF1in
43 IF1Vcc
44 FMIF1out
45 AMIF1out
46 FMIimAin1
47 FMIimAin2
48 200kSD
T51
TP202
TP53
CF51
CF52
CF53
1ST IF(FM/AM 10.7MHz)

Mark	Band	Input Level
None	–	–
F0	FM	0dBf
F65	FM	65dBf
F125	FM	125dBf
A0	AM	0dBμ
A74	AM	74dBμ
A125	AM	125dBμ

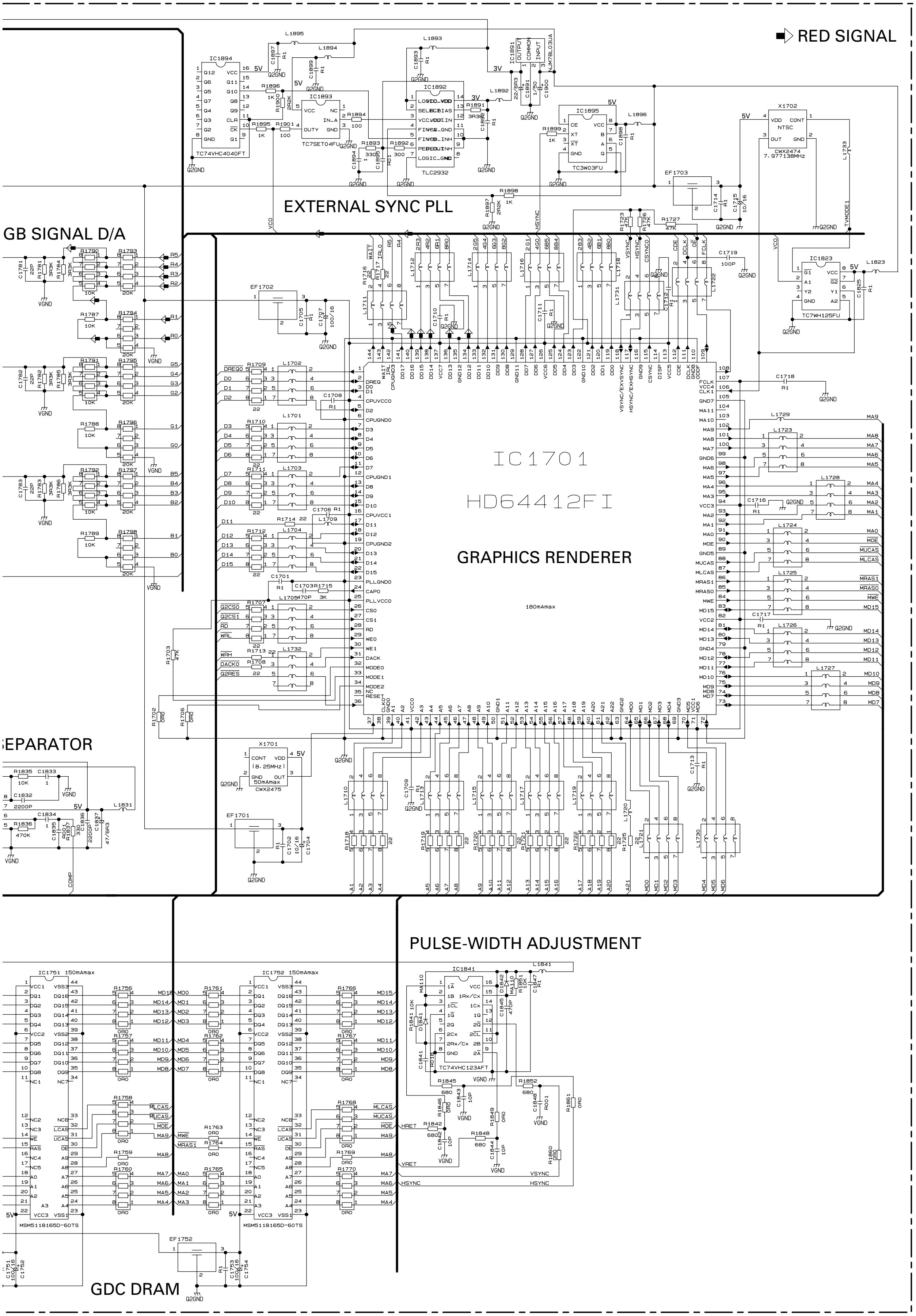

FM OSC
PLL
AM OSC
EEPROM
IC3
BR9010FV
FM MPX
IC1
PML002A
IC2
PM4008A
BUS CONTROL
FM NC
2ND IF(AM 450kHz)
COMP
CREQ
LDET
AMPNS
CE1
CK
DI/DO
SL
CE2
DGND
VDD
SDBW
WC
Lch
Rch
NL2
NL1
FMSD
STIND
VCOVcc 14
FMVCOVref 13
VCOGND 12
AMVCO 11
AMVCOref 10
R-CleanGND 9
DACVref 8
TV 7
LPout 6
FMDAC 5
FM 4
PLLGND 3
AM 2
PLLVcc 1
PLLVref 80
CREQ 79
LDET 78
D-CleanGND 77
Vss 76
Xtal_G 75
Xtal_D 74
VDD 73
AMIF2out 72
SL(FM/AM) 71
CE 70
CK 69
DI/DO 68
41kHzout 67
GD 66
FMSDBW 65
AMSmeter 64
AMDETout 63
AMIF2AGCin 62
AMIF2in 61
47FMIimAin2
48200kSD
49FMDETadj
50FMDETbias
51FMVref4
52FMAFC
53RDSAFC
54FMDETout
55AMMIX2in
56IF2GND
57AMMIX2out
58AMIF2Vref
59IF2Vcc
60IF2Vref
25 PLL FIL
26 DET FIL
27 DET FIL
28 AVCO VCC
29 APLL FIL
30 41kHz IN
31 D-GND
32 DI
33 CE
34 CK
35 VDD
36 AM IN
37 A-VCC
38 SNC TIME
39 HCC TIME
40 MUTE TIME
41 SDBW IN
42 SD TIME
43 ENV OUT
44 SL IN
45 HOLD C
46 COMP IN
47 VREF
48 PNS HPF
PLL FIL 24
SL OUT 23
APLL GND 22
ST IND 21
SUB BIAS 20
L OUT 19
R OUT 18
HI BLEND 17
SEP ADJ 16
HCC C 15
A-GND 14
NL2 13
NL1 12
SD OUT 11
SL ADJ 10
MGDELAY 9
SL19K OUT 8
SL19K FIL 7
DEVDET OUT 6
DEVDET FIL 5
SM PNSSENS 4
PNSSENS 3
AGC 2
AGCGAIN 1
TP901 TV
TP902 WC
TP903 D-CLG
TP904 R-CLG
TP101 FMSL
TP102 (to GND)
TP103 (to VDD)
TP104
TP105
TP106
TP107
TP108
TP51 CM
TP52
X901 CSS1432 10.250MHz
D903 KV1410(23)
D904 SVC253
D101 MA110
CF202
L901
L902
L904
L905
R902 10K
R904 47K
R914 5R6K
R104 5R6K
R117 33K
R118 22K
R208 100K
R209 100K
R61 43K
R110 150K
R111 27K
R115 330K
R116 47K
R112 22K
R909 47K
C115 R047
C116 2R2/50
C904 2200P
C907 15P
C906 10P
C909 10P
C910 3300P
C920 27P
C921 27P
C217 R01
C121 3300P
C122 6800P
C123 680P
C225 2700P

3.5 GDC UNIT(GUIDE PAGE)

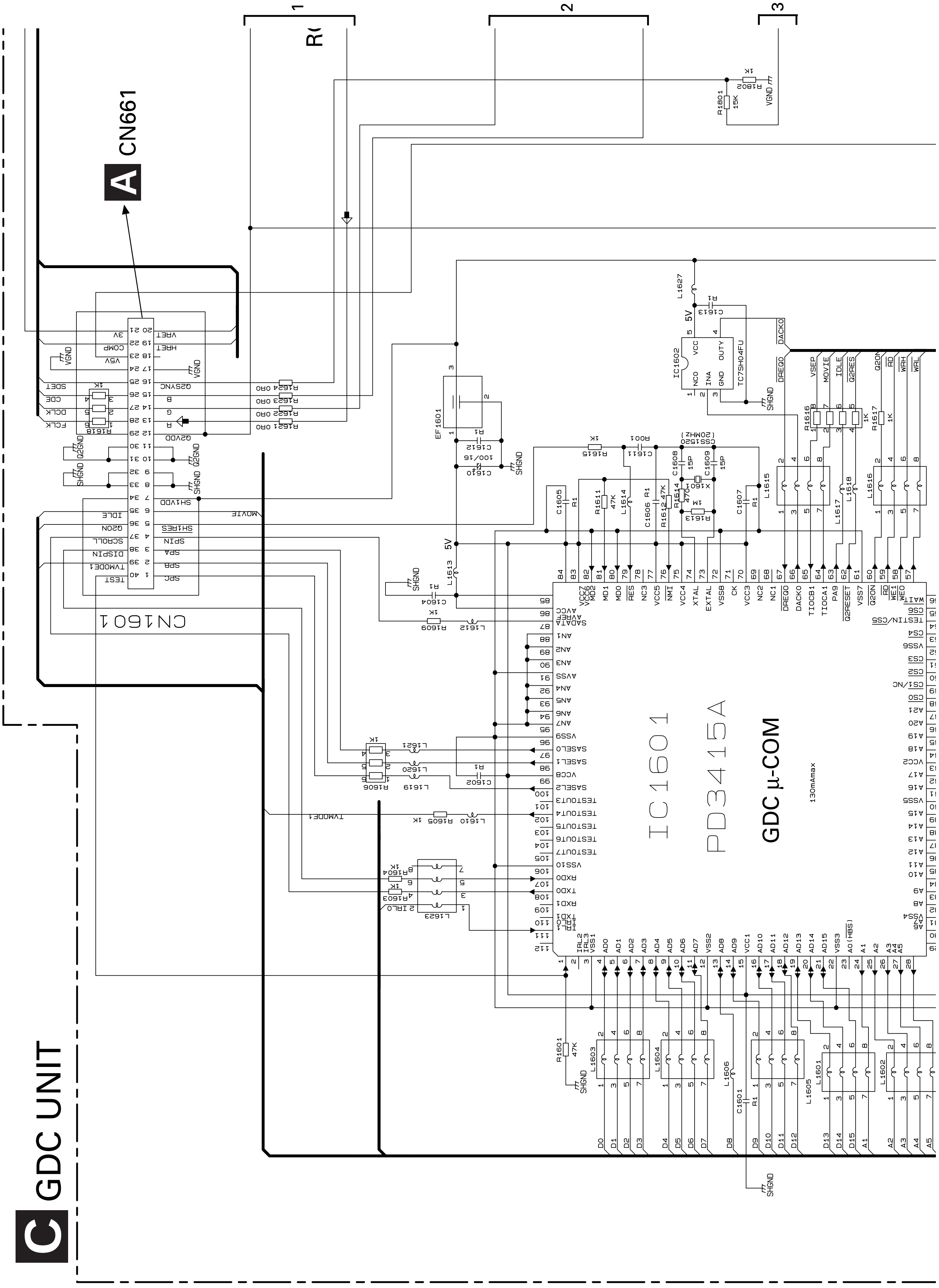
C-a


C GDC UNIT
CN1601
A CN661
IC1601
PD3415A
GDC μ-COM
130mAmax
IC1602
TC7SH04FU
EF1601
SYNC S
IC1831
BA7046F
IC1651
PD8064A
IC1652
PD8065A
EF1651
EF1652
EF1751
DISPLAY ROM
SHGND
Q2GND
VGND
5V

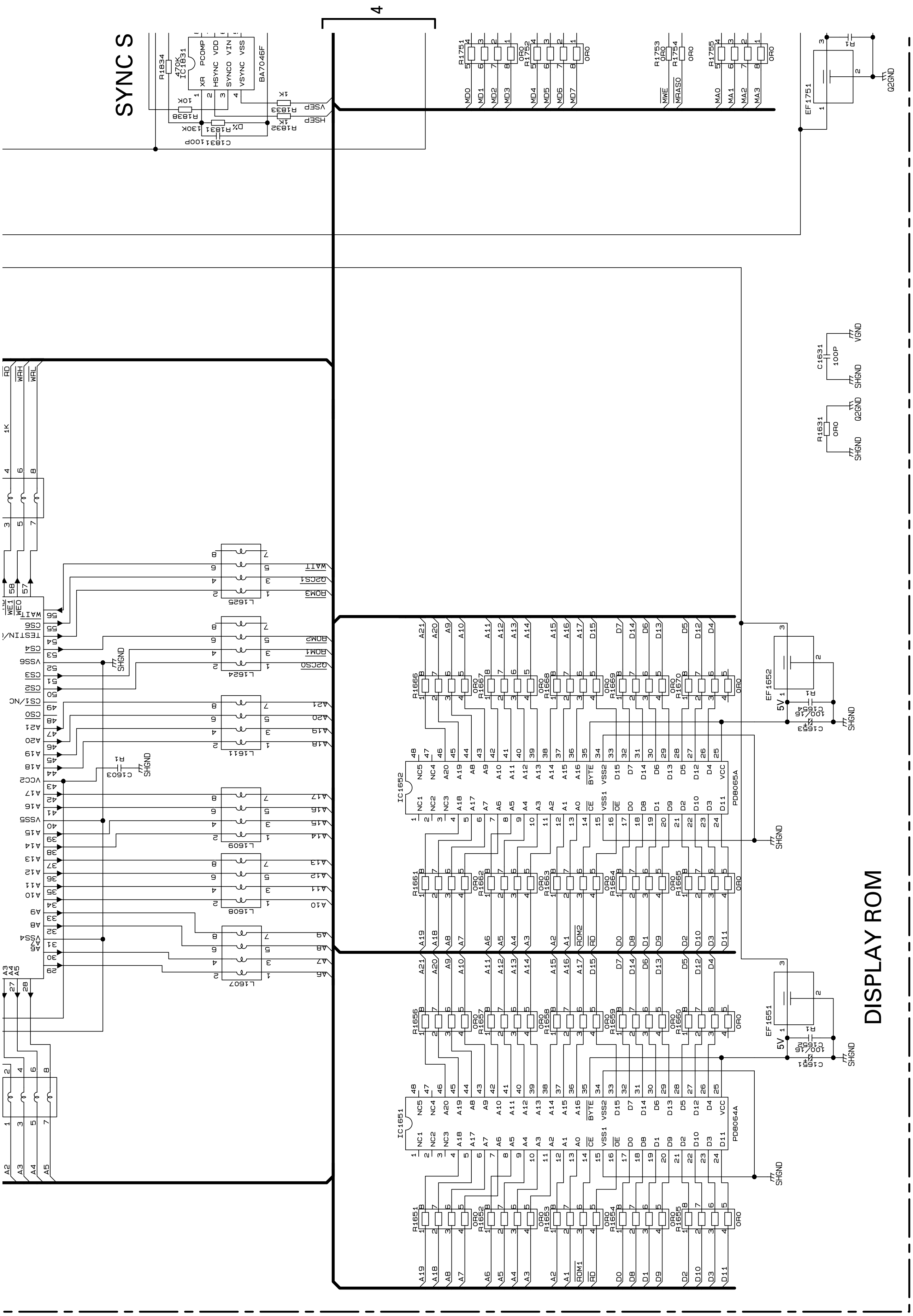
C-b

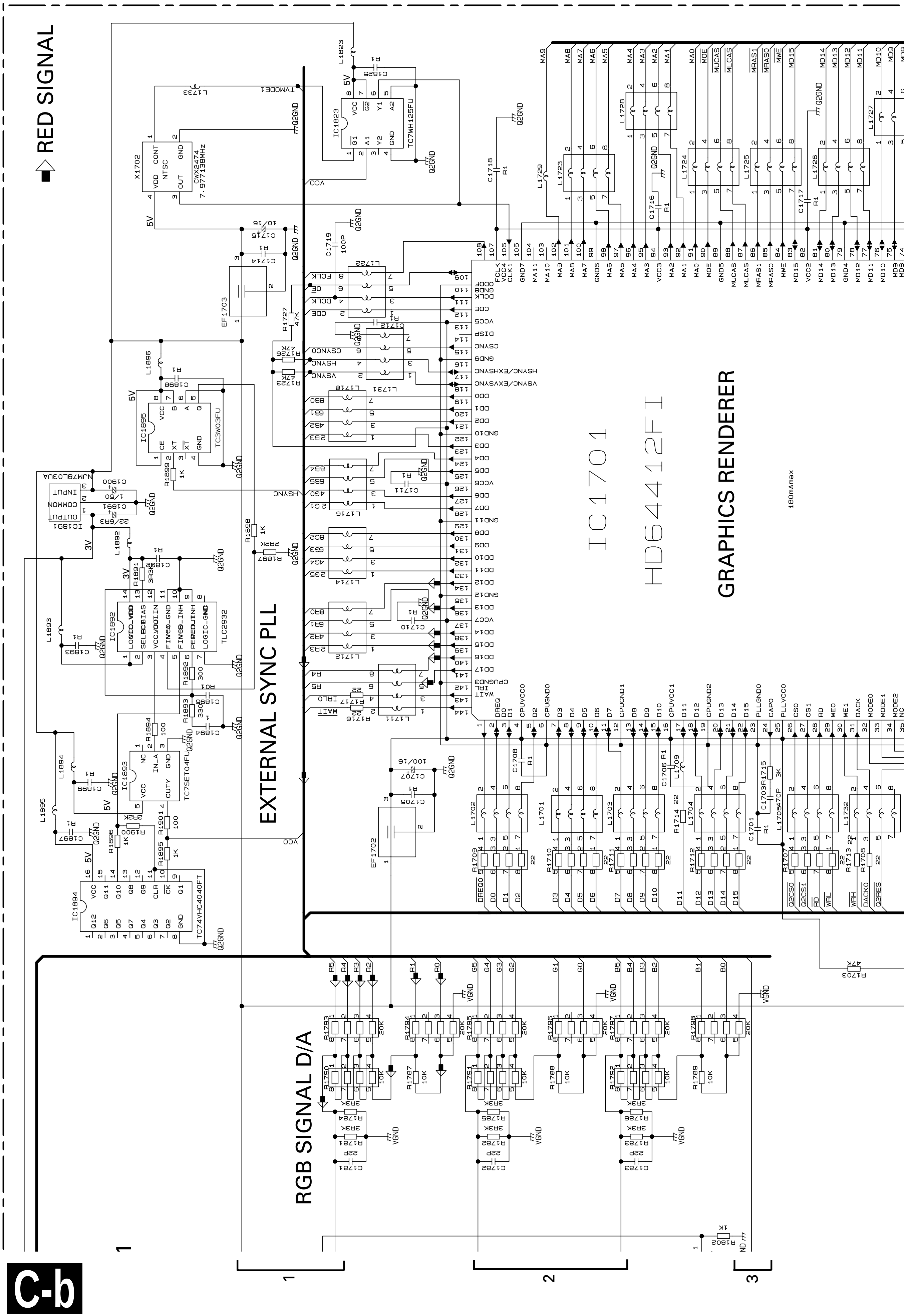

RED SIGNAL
EXTERNAL SYNC PLL
GB SIGNAL D/A
IC1894
TC74VHC4040FT
IC1893
TC7SET04FU
IC1892
TLC2932
IC1891
NJM78L03UA
IC1895
TC3W03FU
X1702
CWX2474
7.977138MHz
EF1703
IC1823
TC7WH125FU
EF1702
IC1701
HD64412FI
GRAPHICS RENDERER
180mAmax
SEPARATOR
X1701
(8.25MHz)
50mAmax
CWX2475
EF1701
PULSE-WIDTH ADJUSTMENT
IC1841
TC74VHC123AFT
IC1751 150mAmax
MSM51I8165D-60TS
IC1752 150mAmax
MSM51I8165D-60TS
EF1752
GDC DRAM
A
B
C
D

C-a C-b


C GDC UNIT
A CN661
CN1601
IC1601
PD3415A
GDC µ-COM
130mAmax
IC1602
TC7SH04FU
EF1601
X1601
CSS1520 (20MHZ)
1
2
3
VGND
SHGND
Q2GND
5V
R1801 15K
R1802 1K
R1601 47K
R1615 1K
R1611 47K
R1612 47K
R1613 1M
R1614 470
R1616 1K
R1617 1K
R1618 1K
R1621 0RO
R1622 0RO
R1623 0RO
R1624 0RO
R1603 1K
R1604 1K
R1605 1K
R1606 1K
R1609 1K
C1601
C1602
C1604
C1605
C1606
C1607
C1608 15P
C1609 15P
C1610 100/16
C1611
C1612
C1613
L1601
L1602
L1603
L1604
L1605
L1606
L1610
L1612
L1613
L1614
L1615
L1616
L1617
L1618
L1619
L1620
L1621
L1623
L1627
VRET
HRET
V5V
Q2SYNC
B
G
R
Q2VDD
SH1VDD
MOVIE
SH1RES
SPIN
SPA
SPB
SPC
TEST
TVMODE1
DISPIN
SCROLL
Q2ON
IDLE
SDET
CDE
DCLK
FCLK
3V
COMP
DREQ0
DACK0
VSEP
Q2RES
RD
WRH
WRL
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
A1
A2
A3
A4
A5

C-a C-b


SYNC S
IC1831
BA7046F
XR
PCOMP
HSYNC
VDD
SYNCO
VIN
VSYNC
VSS
R1834
470K
R1838
10K
R1831
130K
C1831
100P
R1833
1K
R1832
1K
VSEP
HSEP
4
R1751
R1752
R1753
R1754
R1755
MD0
MD1
MD2
MD3
MD4
MD5
MD6
MD7
MWE
MRAS0
MA0
MA1
MA2
MA3
EF1751
Q2GND
C1631
100P
VGND
SHGND
R1631
0R0
Q2GND
RD
WRH
WRL
1K
L1625
L1624
L1611
L1609
L1608
L1607
WAIT
Q2CS1
ROM3
ROM2
ROM1
Q2CS0
C1603
SHGND
IC1652
PD8065A
IC1651
PD8064A
NC1
NC2
NC3
NC4
NC5
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
A19
A20
A21
CE
OE
BYTE
VSS1
VSS2
VCC
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
R1651
R1652
R1653
R1654
R1655
R1656
R1657
R1658
R1659
R1660
R1661
R1662
R1663
R1664
R1665
R1666
R1667
R1668
R1669
R1670
0R0
EF1651
EF1652
5V
C1651
C1653
100/16
SHGND
DISPLAY ROM
WAIT
CS6
TESTIN
CS4
VSS6
CS3
CS2
CS1/NC
CS0
VCC2
VSS5
VSS4
WE1
WE0

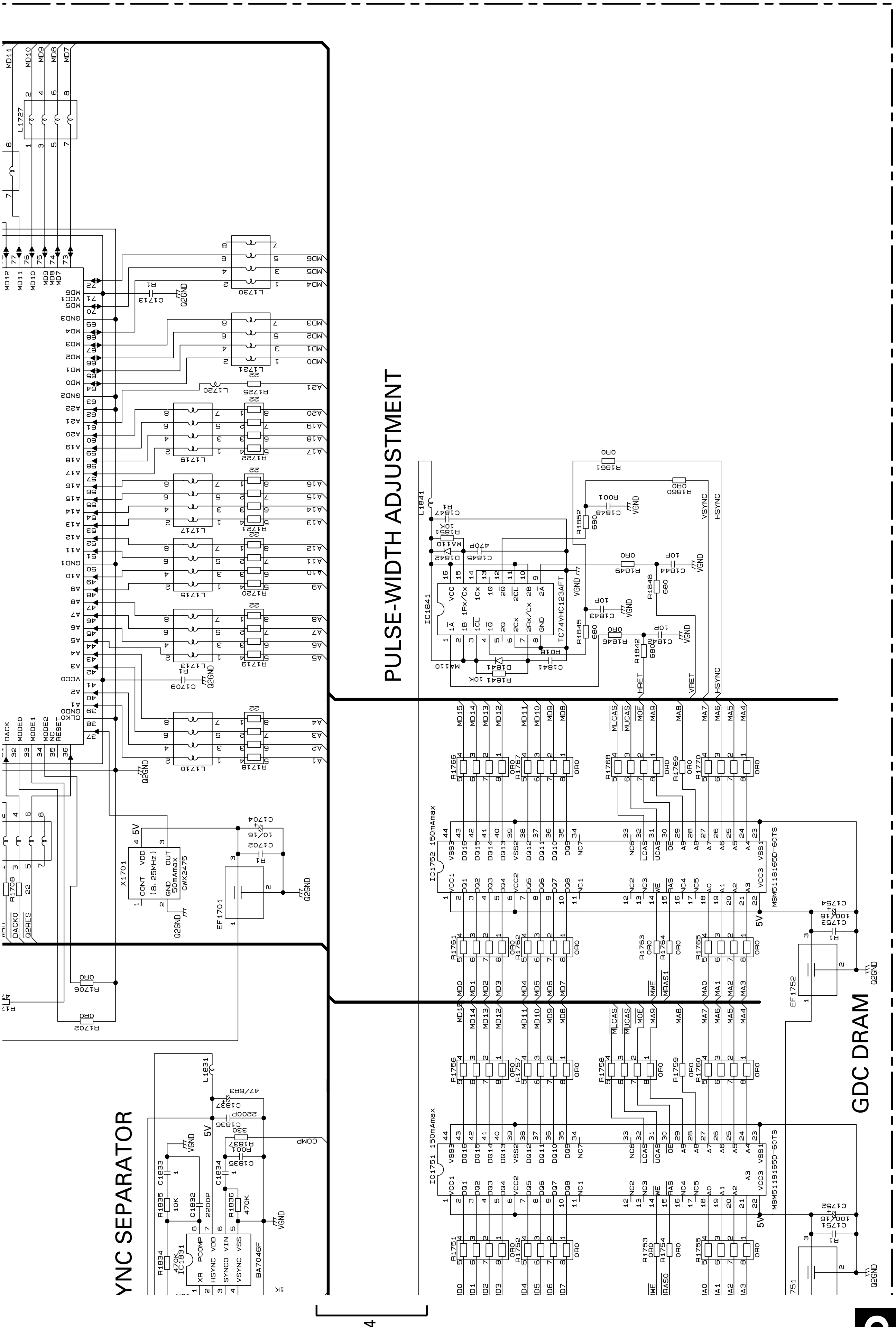

RED SIGNAL
EXTERNAL SYNC PLL
RGB SIGNAL D/A
IC1701
HD64412FI
GRAPHICS RENDERER
180mAmax
IC1823 TC7WH125FU
X1702 CWX2474 7.977138MHz
IC1895 TC7W03FU
IC1891 NJM78L03UA
IC1892 TLC2932
IC1893 TC7SET04FU
IC1894 TC74VHC4040FT
EF1702
EF1703
R1793 R1794 R1795 R1796 R1797 R1798
R1790 R1787 R1791 R1788 R1792 R1789
C1781 C1782 C1783
VGND
Q2GND
1
2
3

A

B

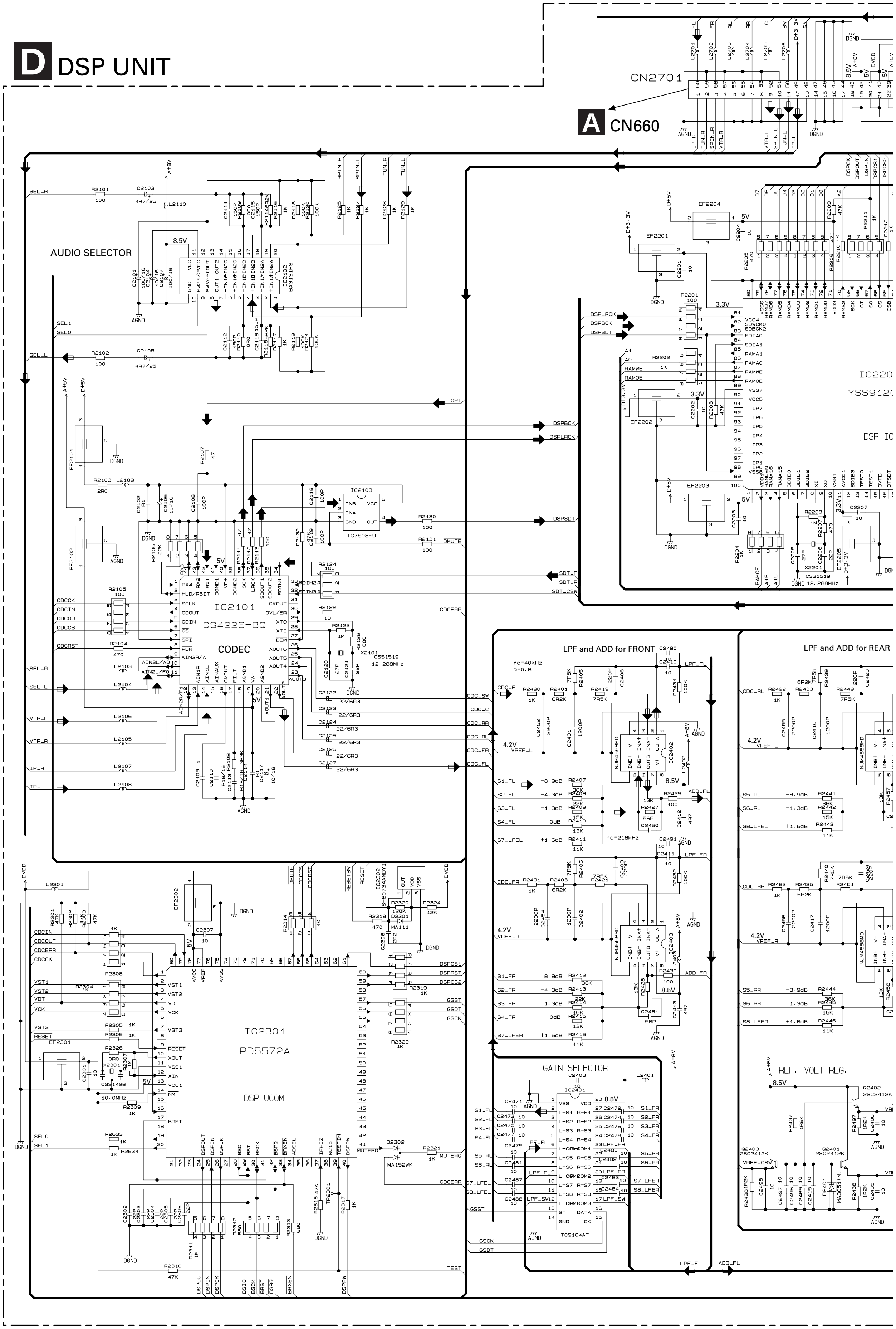
C

D

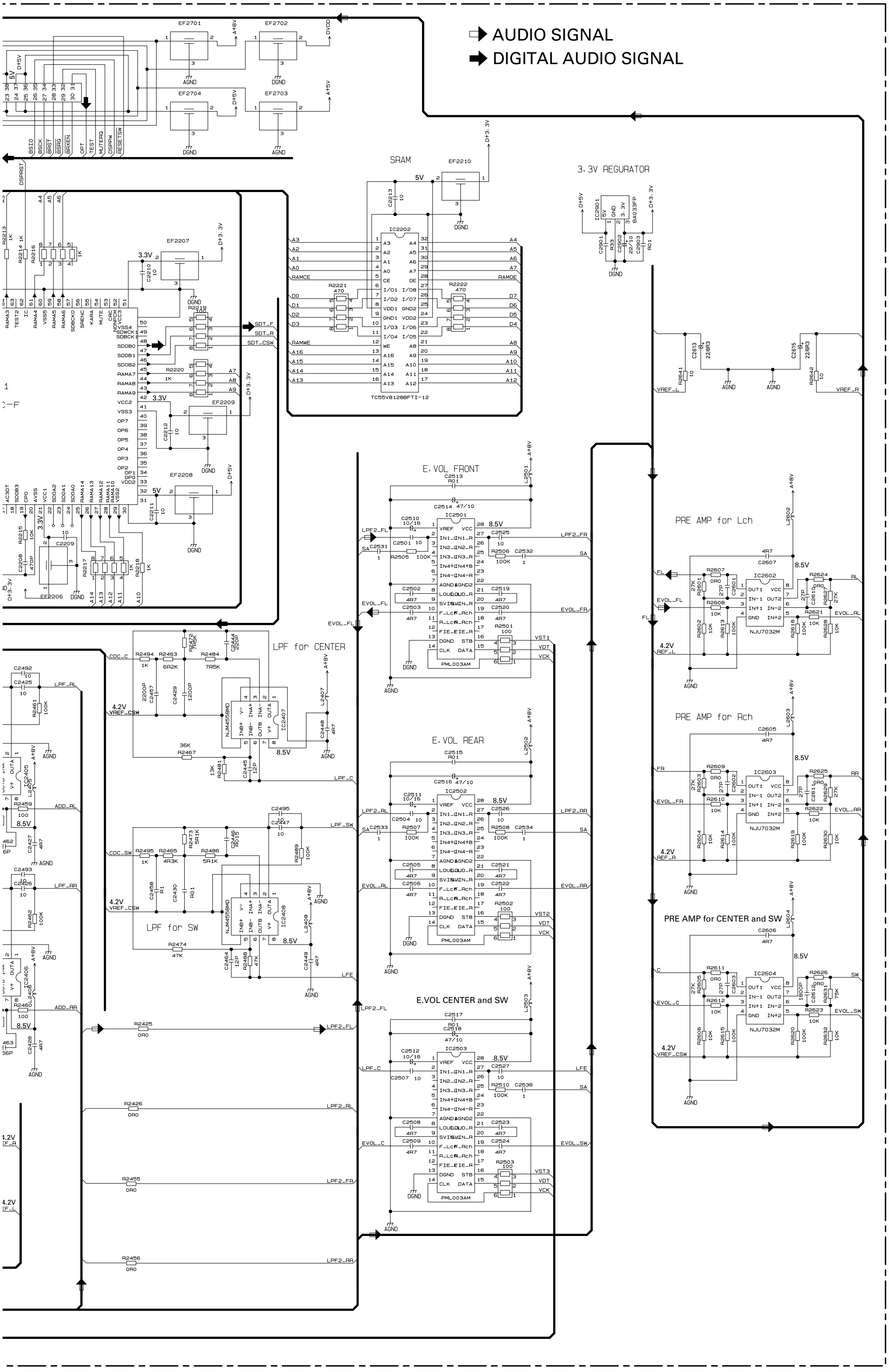

PULSE-WIDTH ADJUSTMENT
GDC DRAM
YNC SEPARATOR
IC1841
TC74VHC123AFT
IC1752 150mAmax
MSM5118165D-60TS
IC1751 150mAmax
MSM5118165D-60TS
IC1831
BA7046F
X1701
(8.25MHz)
50mAmax
CWX2475
EF1701
EF1752
L1727
L1730
L1721
L1720
L1719
L1717
L1715
L1713
L1710
L1841
L1831
R1722
R1721
R1720
R1719
R1718
R1725
R1706
R1702
R1708
R1852
R1851
R1861
R1860
R1849
R1848
R1845
R1846
R1842
R1841
R1756
R1757
R1758
R1759
R1760
R1766
R1767
R1768
R1769
R1770
R1761
R1762
R1763
R1764
R1765
R1751
R1752
R1753
R1754
R1755
R1834
R1835
R1836
R1837
C1713
C1709
C1704
C1702
C1847
C1845
C1846
C1844
C1843
C1842
C1841
C1754
C1753
C1752
C1751
C1831
C1832
C1833
C1834
C1835
C1836
C1837
D1841
D1842
MA110
VSYNC
HSYNC
VRET
HRET
COMP
Q2GND
VGND
5V
VCC0
GND0
GND1
GND2
GND3
CLK0
DACK
MODE0
MODE1
MODE2
RESET
DACK0
Q2RES
MLCAS
MUCAS
MOE
MWE
MRAS0
MRAS1
4

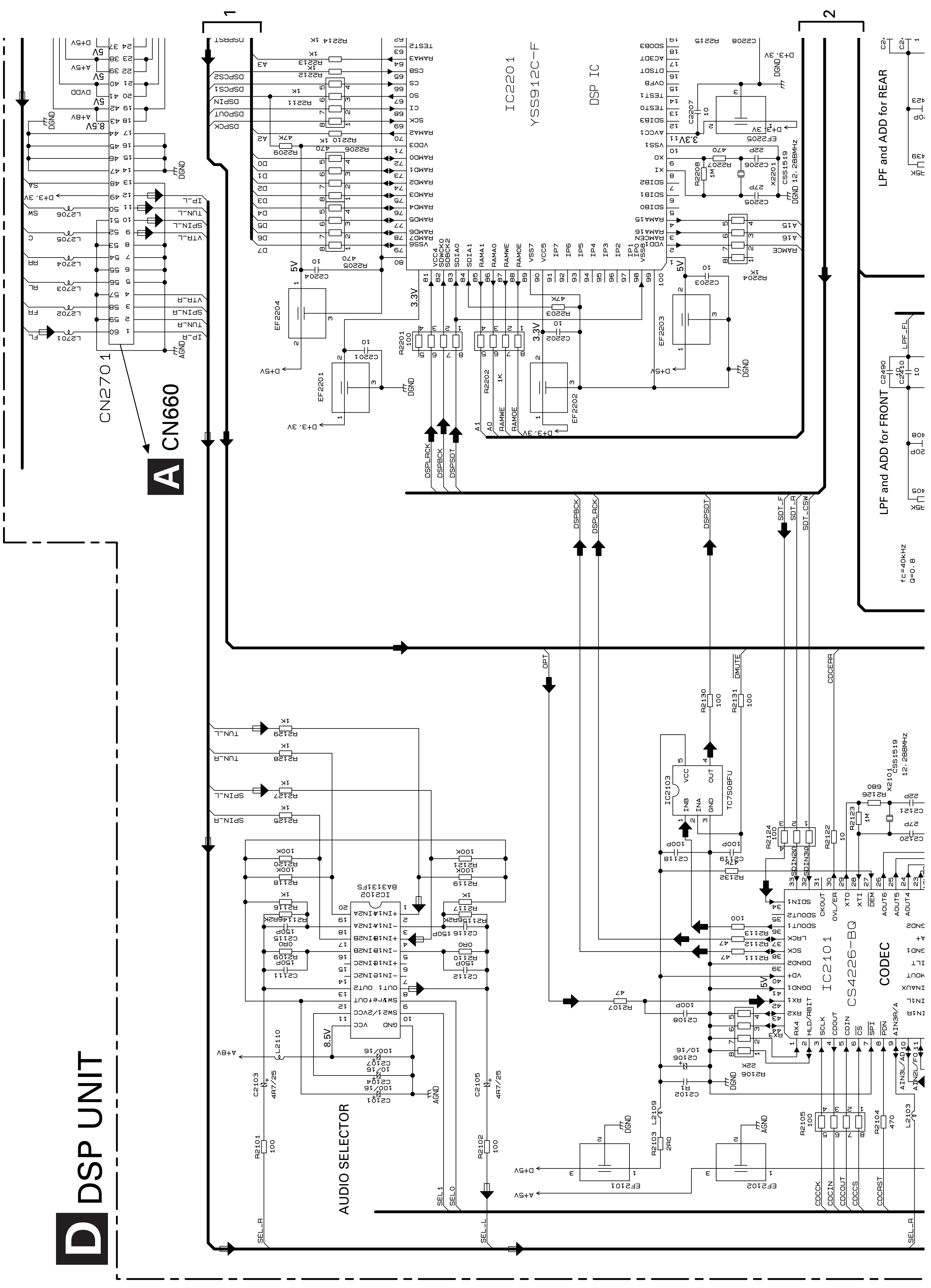
3.6 DSP UNIT(GUIDE PAGE)

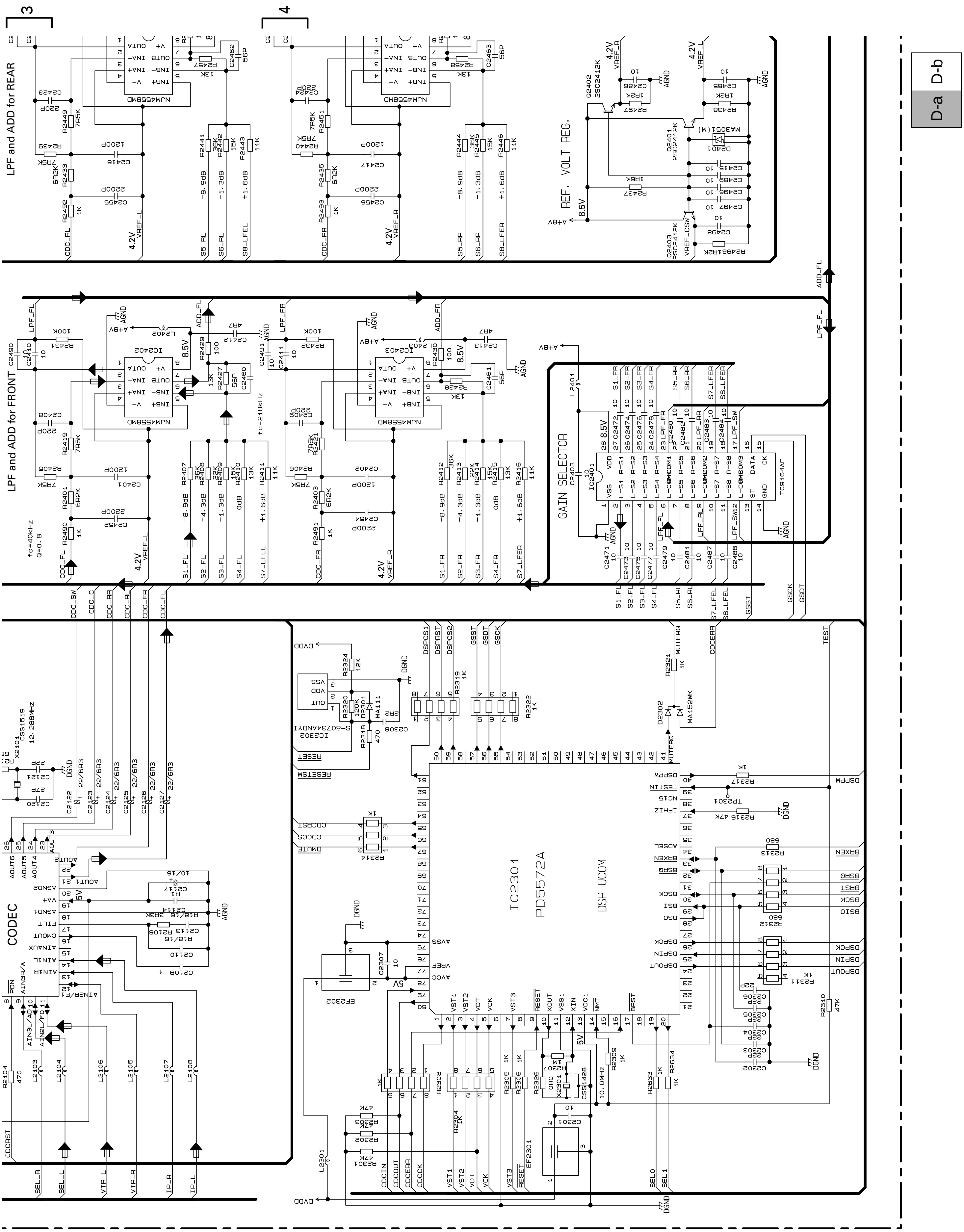
D-a

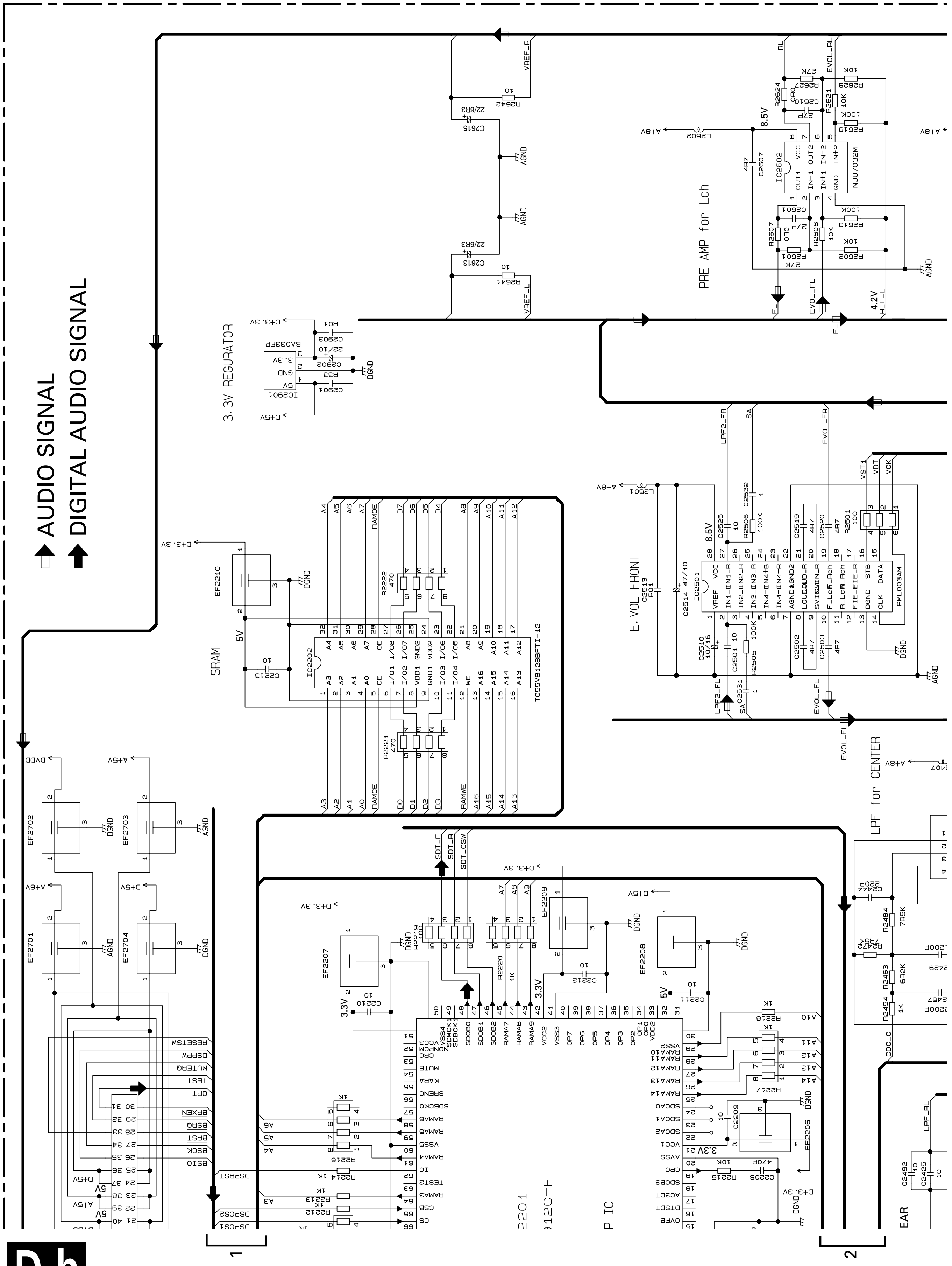

D DSP UNIT
CN2701
A CN660
AUDIO SELECTOR
IC2102
BA3131FS
IC2101
CS4226-BQ
CODEC
IC2103
TC7S08FU
X2101
CSS1519
12.288MHz
IC2201
YSS912C
DSP IC
EF2201
EF2202
EF2203
EF2204
EF2205
X2201
CSS1519
12.288MHz
LPF and ADD for FRONT
LPF and ADD for REAR
fc=40kHz
Q=0.8
fc=218kHz
IC2402
NJM4558MD
IC2403
NJM4558MD
IC2301
PD5572A
DSP UCOM
EF2301
X2301
CSS1428
10.0MHz
IC2302
S-80734ANDY
D2301
MA111
D2302
MA152WK
GAIN SELECTOR
IC2401
TC9164AF
REF. VOLT REG.
Q2401
2SC2412K
Q2402
2SC2412K
Q2403
2SC2412K
D2401
MA3051(M)
DSPBCK
DSPLRCK
DSPSDT
OPT
DMUTE
SDT_F
SDT_R
SDT_CSW
CDCERR
CDC_SW
CDC_C
CDC_RR
CDC_RL
CDC_FR
CDC_FL
SEL_R
SEL_L
SEL1
SEL0
VTR_L
VTR_R
IP_R
IP_L
CDCCK
CDCIN
CDCOUT
CDCCS
CDCRST
DSPCS1
DSPRST
DSPCS2
GSST
GSDT
GSCK
TEST
MUTERQ
A+8V
A+5V
D+5V
D+3.3V
DVDD
AGND
DGND
8.5V
5V
3.3V
4.2V

D-b


AUDIO SIGNAL
DIGITAL AUDIO SIGNAL
EF2701
EF2702
EF2703
EF2704
A+8V
A+5V
D+5V
DVDD
AGND
DGND
BSIO
BSCK
BRST
BSRQ
BRXEN
OPT
TEST
MUTERQ
DSPPW
RESETSW
DSPRST
SRAM
EF2210
D+3.3V
5V
IC2202
TC55V8128BFTI-12
R2221 470
R2222 470
RAMCE
RAMWE
3.3V REGURATOR
IC2901
BA033FP
C2901
C2902 22/10
C2903
R33
R01
EF2207
EF2208
EF2209
EF2206
R2219
R2220 1K
R2213 1K
R2214 1K
R2216
R2215 10K
R2217
R2218 1K
C2208 470P
C2209
C2210
C2211
C2212
SDT_F
SDT_R
SDT_CSW
3.3V
LPF for CENTER
IC2407
NJM4558MD
R2494 1K
R2463 6R2K
R2472 7R5K
R2484 7R5K
R2467 36K
R2481 13K
C2457 2200P
C2429
C2444 220P
C2445 12P
C2448 4R7
L2407
CDC_C
4.2V VREF_CSW
LPF_C
8.5V
LPF for SW
IC2408
R2495 1K
R2465 4R3K
R2473 5R1K
R2486 5R1K
R2474 47K
R2489 100K
R2488 47K
C2458
C2430
C2446
C2447 10
C2495 10
C2464 12P
C2449 4R7
L2408
CDC_SW
LFE
LPF_SW
C2492 10
C2425 10
R2461 100K
LPF_RL
C2493 10
C2426 10
R2462 100K
LPF_RR
IC2405
IC2406
R2459 100
R2460 100
C2427 4R7
C2428 4R7
ADD_RL
ADD_RR
R2425 0R0
R2426 0R0
R2455 0R0
R2456 0R0
LPF2_FL
LPF2_RL
LPF2_FR
LPF2_RR
E.VOL FRONT
IC2501
E.VOL REAR
IC2502
E.VOL CENTER and SW
IC2503
PML003AM
L2501
L2502
L2503
C2513 R01
C2514 47/10
C2515 R01
C2516 47/10
C2517 R01
C2518 47/10
C2510 10/16
C2511 10/16
C2512 10/16
R2505 100K
R2506 100K
R2507 100K
R2508 100K
R2510 100K
R2501 100
R2502 100
R2503 100
VREF VCC
IN1_L IN1_R
IN2_L IN2_R
IN3_L IN3_R
IN4+B IN4+B
IN4_L IN4_R
AGND AGND2
LOUD_L LOUD_R
SVIN_L SVIN_R
F_Lch R_Lch
FIE_L FIE_R
DGND STB
CLK DATA
SA
EVOL_FL
EVOL_FR
EVOL_RL
EVOL_RR
EVOL_C
EVOL_SW
VST1
VST2
VST3
VDT
VCK
LPF_FL
LPF_RL
LPF_C
PRE AMP for Lch
IC2602
PRE AMP for Rch
IC2603
PRE AMP for CENTER and SW
IC2604
NJU7032M
OUT1 VCC
IN-1 OUT2
IN+1 IN-2
GND IN+2
L2602
L2603
L2604
C2607 4R7
C2605 4R7
C2606 4R7
R2607 0R0
R2609 0R0
R2611 0R0
R2608 10K
R2610 10K
R2612 10K
R2624
R2625
R2626
R2621 10K
R2622 10K
R2623 10K
C2613 22/6R3
C2615 22/6R3
R2641 10
R2642 10
VREF_L
VREF_R
4.2V REF_L
4.2V REF_R
4.2V VREF_CSW
FL
FR
C
RL
RR
SW
EVOL_FL
EVOL_RL
EVOL_FR
EVOL_RR
EVOL_C
EVOL_SW
1800P
75K
27K
27P
100K
10K


D DSP UNIT
A CN660
CN2701
AUDIO SELECTOR
IC2102
BA3131FS
IC2101
CS4226-BQ
CODEC
IC2201
YSS912C-F
DSP IC
IC2103
TC7S08FU
LPF and ADD for FRONT
LPF and ADD for REAR
fc=40kHz
Q=0.8
X2101
CSS1519
12.288MHz
X2201
CSS1519
12.288MHz
EF2101
EF2102
EF2201
EF2202
EF2203
EF2204
EF2205
DSPLRCK
DSPBCK
DSPSDT
SDT_F
SDT_R
SDT_CSW
OPT
DMUTE
CDCERR
CDCCK
CDCIN
CDCOUT
CDCCS
CDCRST
SEL_R
SEL_L
SEL_0
SEL_1
TUN_L
TUN_R
SPIN_L
SPIN_R
A+8V
D+5V
A+5V
D+3.3V
DGND
AGND
1
2


3
4
LPF and ADD for REAR
LPF and ADD for FRONT
NJM4558MD
IC2402
IC2403
fc=40kHz
Q=0.8
fc=218kHz
REF. VOLT REG.
Q2401 2SC2412K
Q2402 2SC2412K
Q2403 2SC2412K
D2401 MA3051(M)
GAIN SELECTOR
IC2401
TC9164AF
CODEC
X2101 CSS1519 12.288MHz
IC2301
PD5572A
DSP UCOM
IC2302 S-80734ANDYI
D2301 MA111
D2302 MA152WK
X2301 CSS1428 10.0MHz
EF2301
EF2302
A+8V
8.5V
4.2V
VREF_L
VREF_R
VREF_CSW
AGND
DGND
DVDD
5V
CDC_SW
CDC_C
CDC_RR
CDC_RL
CDC_FR
CDC_FL
SEL_R
SEL_L
VTR_L
VTR_R
IP_R
IP_L
SEL0
SEL1
CDCRST
DSPCS1
DSPRST
DSPCS2
GSST
GSDT
GSCK
MUTERQ
CDCERR
TEST
DSPPW
BRXEN
BSRQ
BRST
BSCK
BSIO
DSPCK
DSPIN
DSPOUT
ADD_FL
LPF_FL
LPF_FR
ADD_FR
RESET
RESETSW
CDCBST
CDCCS
DMUTE
CDCIN
CDCOUT
CDCERR
CDCCK
VST1
VST2
VDT
VCK
VST3

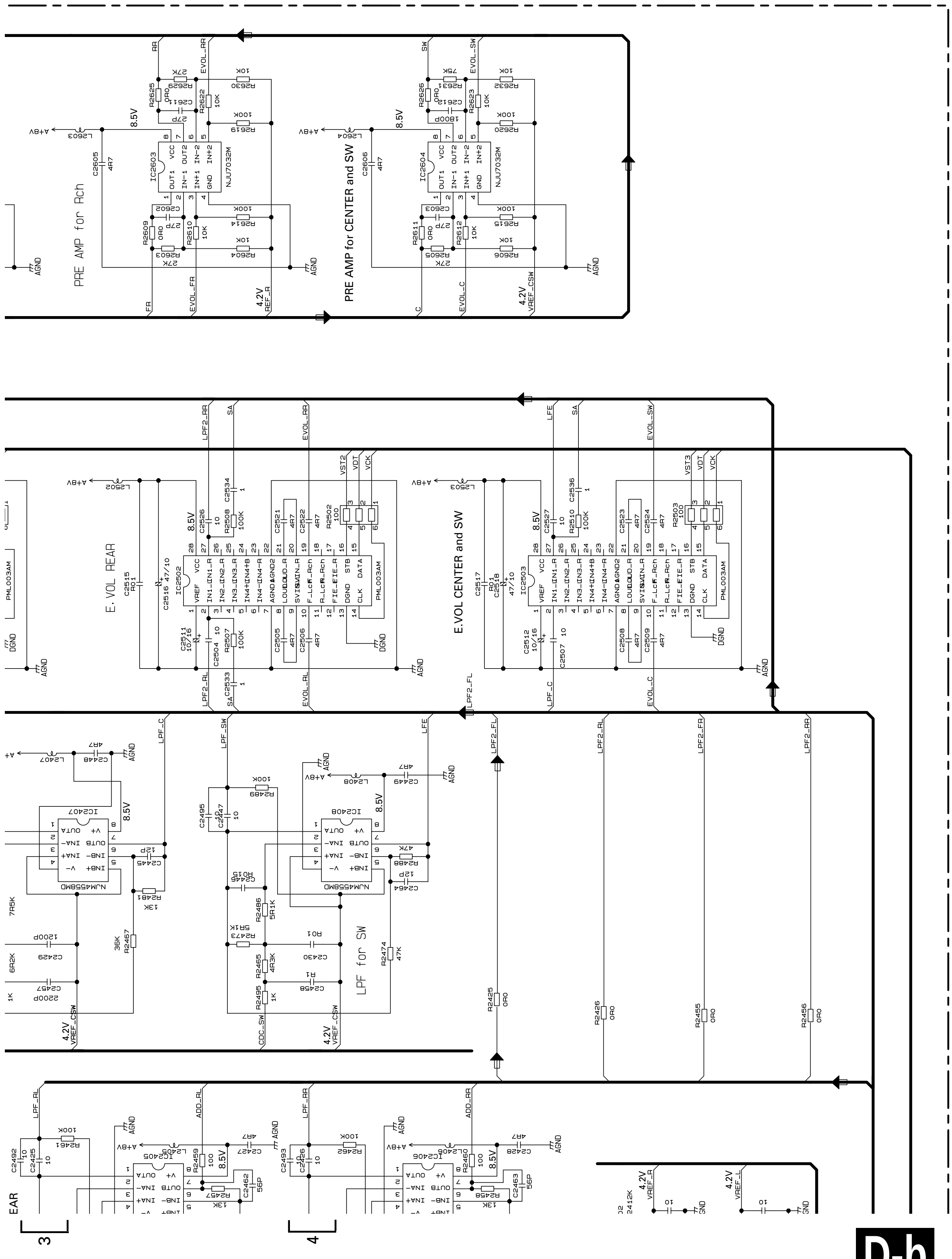

A
B
C
D
AUDIO SIGNAL
DIGITAL AUDIO SIGNAL
3.3V REGURATOR
IC2901
BA033FP
SRAM
IC2202
TC55V8128BFTI-12
R2222 470
R2221 470
EF2210
EF2701
EF2702
EF2703
EF2704
EF2207
EF2208
EF2209
EF2206
R2216
R2217
R2218
R2219
R2220
PRE AMP for Lch
IC2602
NJU7032M
E.VOL FRONT
IC2501
PML003AM
LPF for CENTER
VREF_R
VREF_L
AGND
DGND
A+8V
D+3.3V
D+5V
A+5V
DVDD
8.5V
4.2V
5V
3.3V
SDT_F
SDT_R
SDT_CSW
DSPCS1
DSPCS2
DSPRST
RESETSW
DSPPW
MUTERQ
TEST
OPT
BRXEN
BSRQ
BRST
BSCK
BSIO
EVOL_FL
EVOL_FR
EVOL_RL
LPF2_FL
LPF2_FR
SA
VST1
VDT
VCK
CDC_C
LPF_RL
EAR
1
2

A

B

C

D

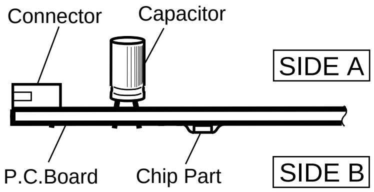

PRE AMP for Rch
IC2603
NJU7032M
PRE AMP for CENTER and SW
IC2604
NJU7032M
E. VOL REAR
IC2502
PML003AM
E.VOL CENTER and SW
IC2503
PML003AM
IC2407
NJM4558MD
IC2408
NJM4558MD
LPF for SW
IC2405
IC2406
A+8V
8.5V
4.2V
AGND
DGND
EVOL_RR
EVOL_SW
EVOL_FR
EVOL_C
EVOL_RL
VREF_R
VREF_CSW
LPF2_RR
LPF2_RL
LPF2_FL
LPF2_FR
LPF_C
LPF_SW
LPF_RL
LPF_RR
ADD_RL
ADD_RR
LFE
SA
SW
VST2
VST3
VDT
VCK
REAR
3
4

4. PCB CONNECTION DIAGRAM

4.1 TUNER AMP UNIT(GUIDE PAGE)

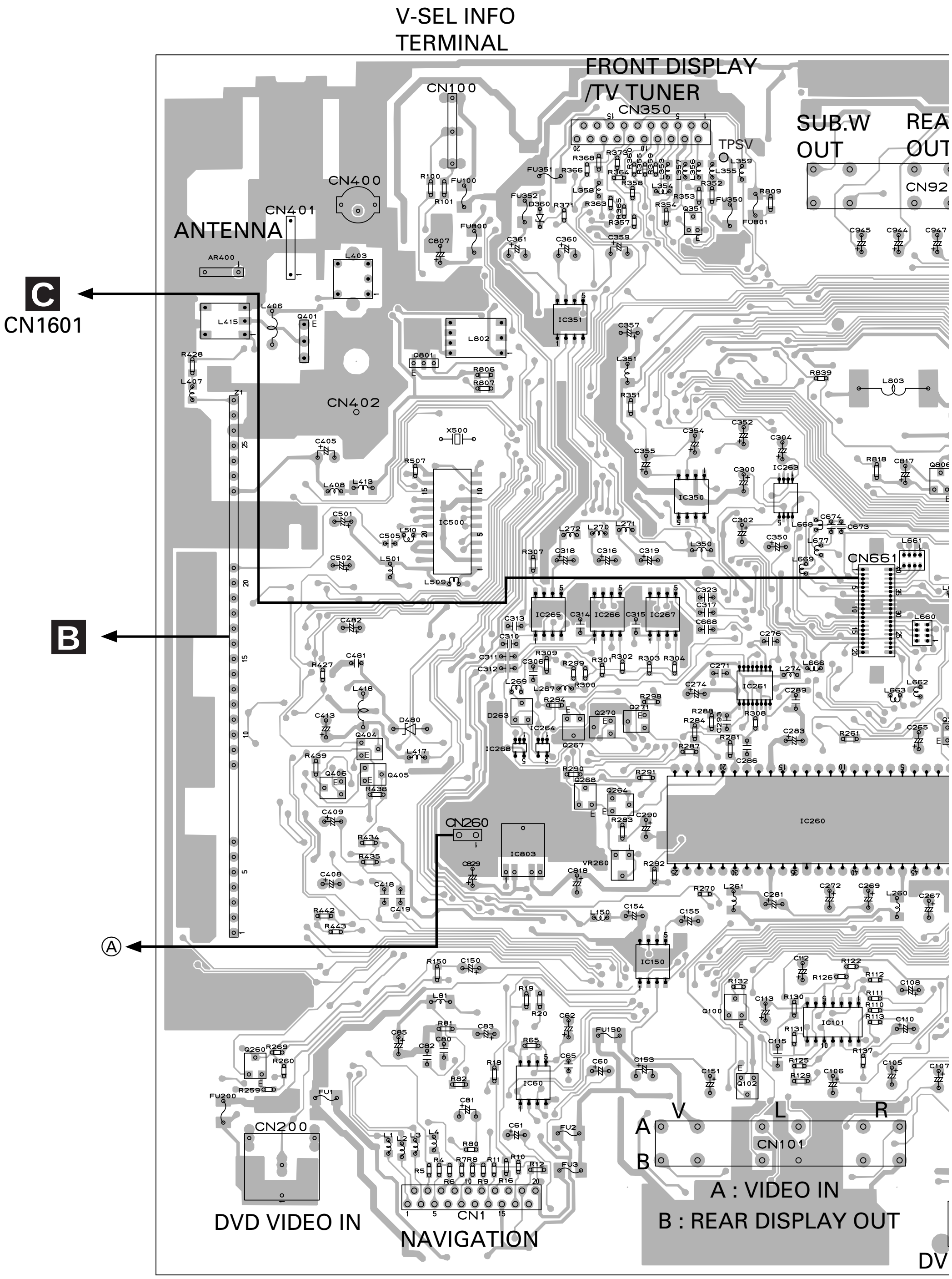
NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams


Connector
Capacitor
SIDE A
P.C.Board
Chip Part
SIDE B

A-a

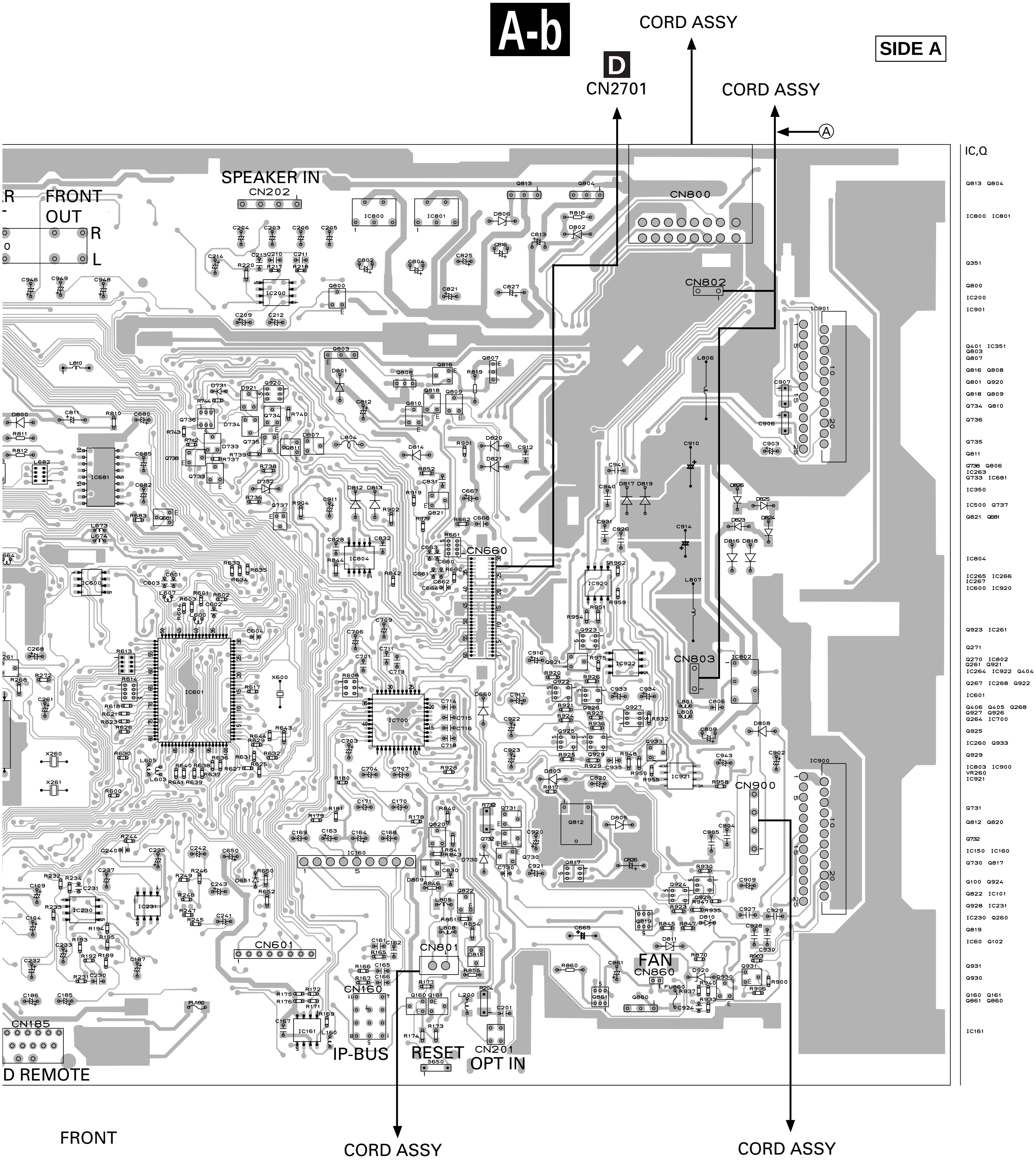
A TUNER AMP UNIT


V-SEL INFO TERMINAL
FRONT DISPLAY /TV TUNER
CN350
TPSV
SUB.W OUT
REA OUT
CN92
CN100
CN400
CN401
ANTENNA
C
CN1601
CN402
IC500
IC351
IC350
IC263
CN661
B
IC265
IC266
IC267
IC261
IC260
CN260
IC803
Ⓐ
IC150
IC101
IC60
CN200
DVD VIDEO IN
CN1
NAVIGATION
V
L
R
A
B
CN101
A : VIDEO IN
B : REAR DISPLAY OUT
DV

A

A-b

SIDE A

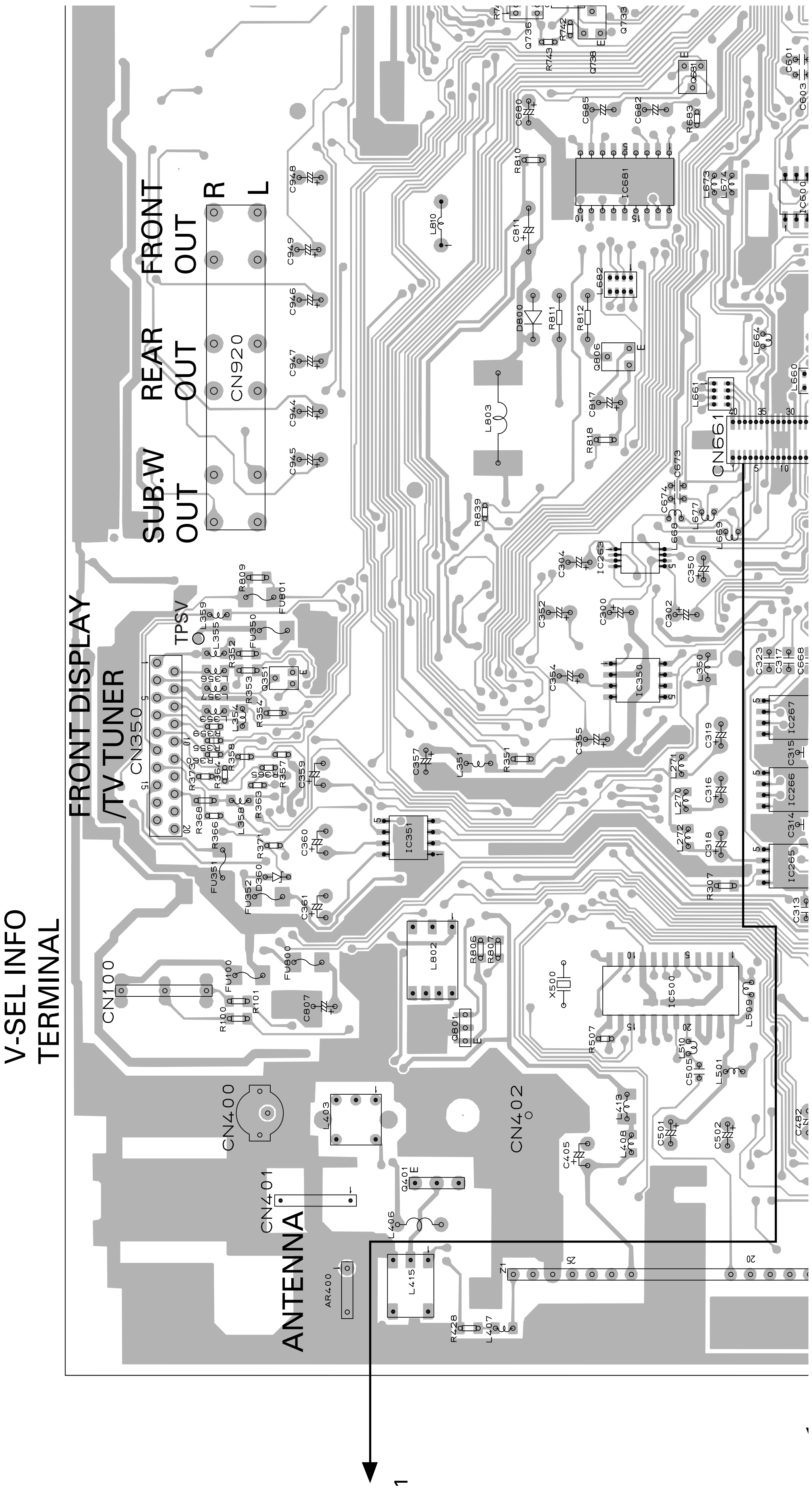

D
CN2701
CORD ASSY
CORD ASSY
Ⓐ
R FRONT OUT
R
L
SPEAKER IN
CN202
CN800
CN802
CN660
CN803
CN900
IC901
IC900
IC601
IC700
IC681
IC600
IC804
IC920
IC922
IC921
IC160
IC200
IC800
IC801
IC230
IC231
IC161
CN601
CN801
CN160
IP-BUS
RESET
S650
CN201
OPT IN
FAN
CN860
CN185
D REMOTE
FRONT
CORD ASSY
CORD ASSY
IC,Q
Q813 Q804
IC800 IC801
Q351
Q800
IC200
IC901
Q401 IC351
Q803
Q807
Q816 Q808
Q801 Q920
Q818 Q809
Q734 Q810
Q736
Q735
Q811
Q738 Q806
IC263
Q733 IC681
IC350
IC500 Q737
Q821 Q681
IC804
IC265 IC266
IC267
IC600 IC920
Q923 IC261
Q271
Q270 IC802
Q261 Q921
IC264 IC922 Q404
Q267 IC268 Q922
IC601
Q406 Q405 Q268
Q927 Q926
Q264 IC700
Q925
IC260 Q933
Q929
IC803 IC900
VR260
IC921
Q731
Q812 Q820
Q732
IC150 IC160
Q730 Q817
Q100 Q924
Q822 IC101
Q928 IC231
IC230 Q260
Q819
IC60 Q102
Q931
Q930
Q160 Q161
Q861 Q860
IC161

B

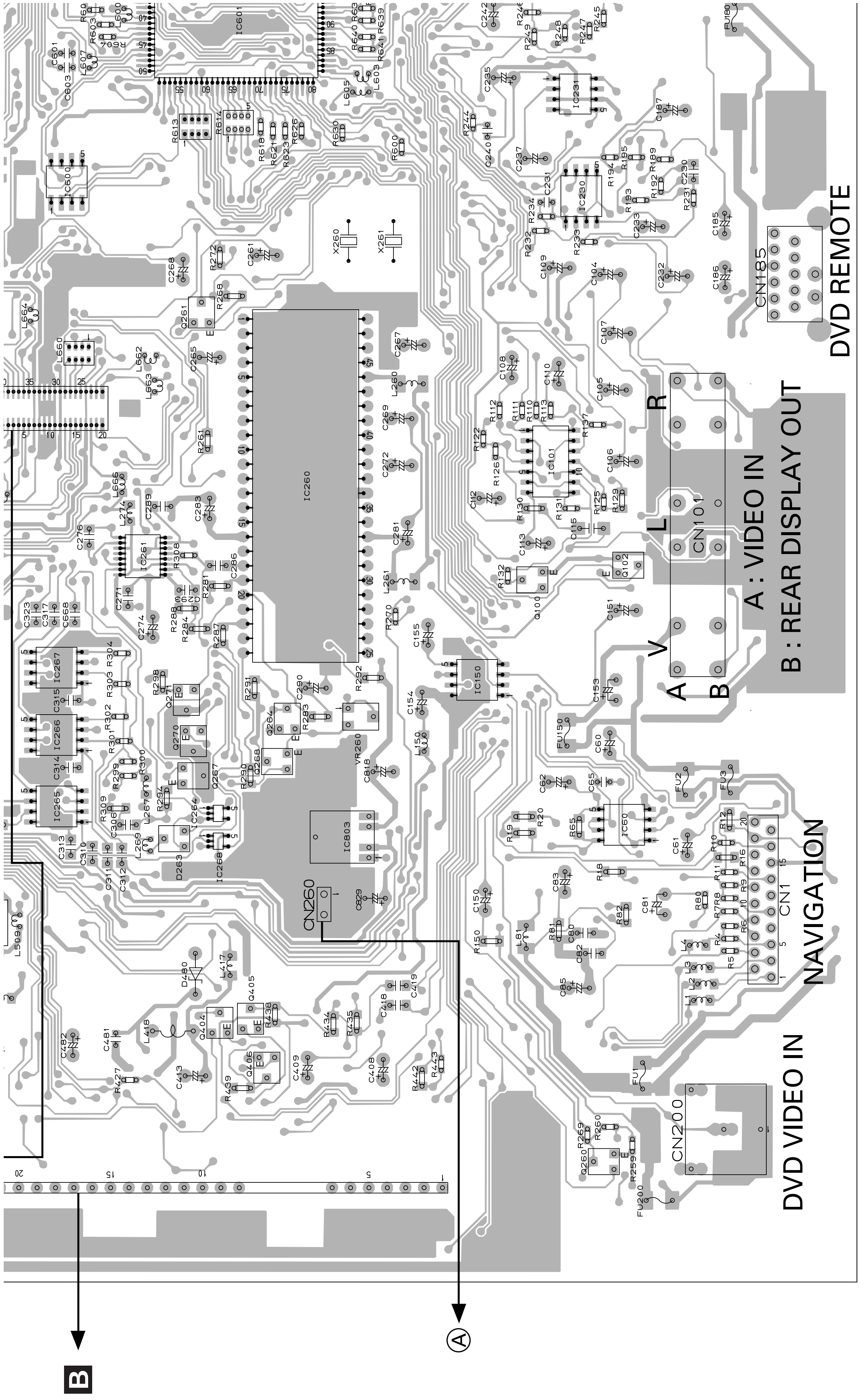
C

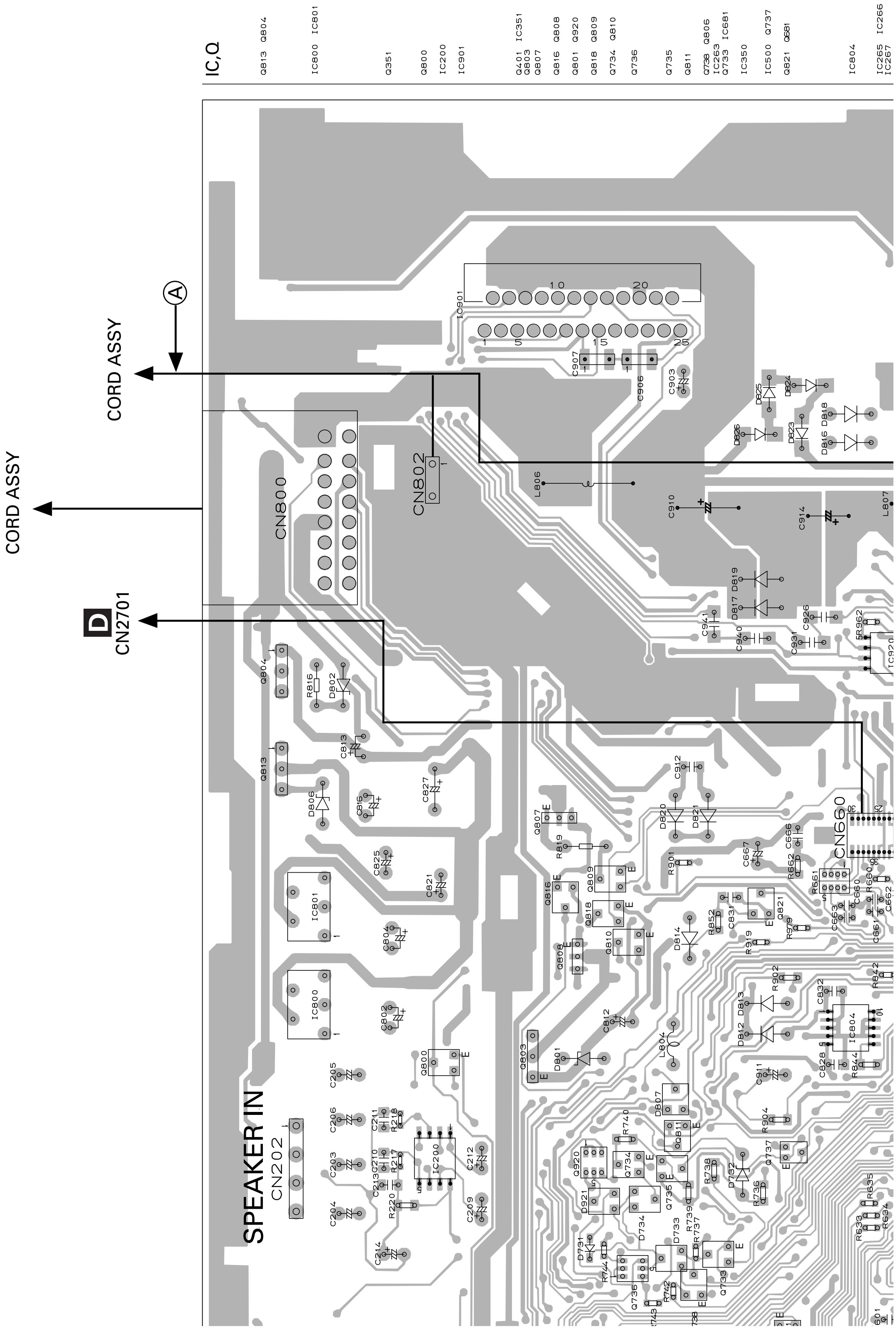
D

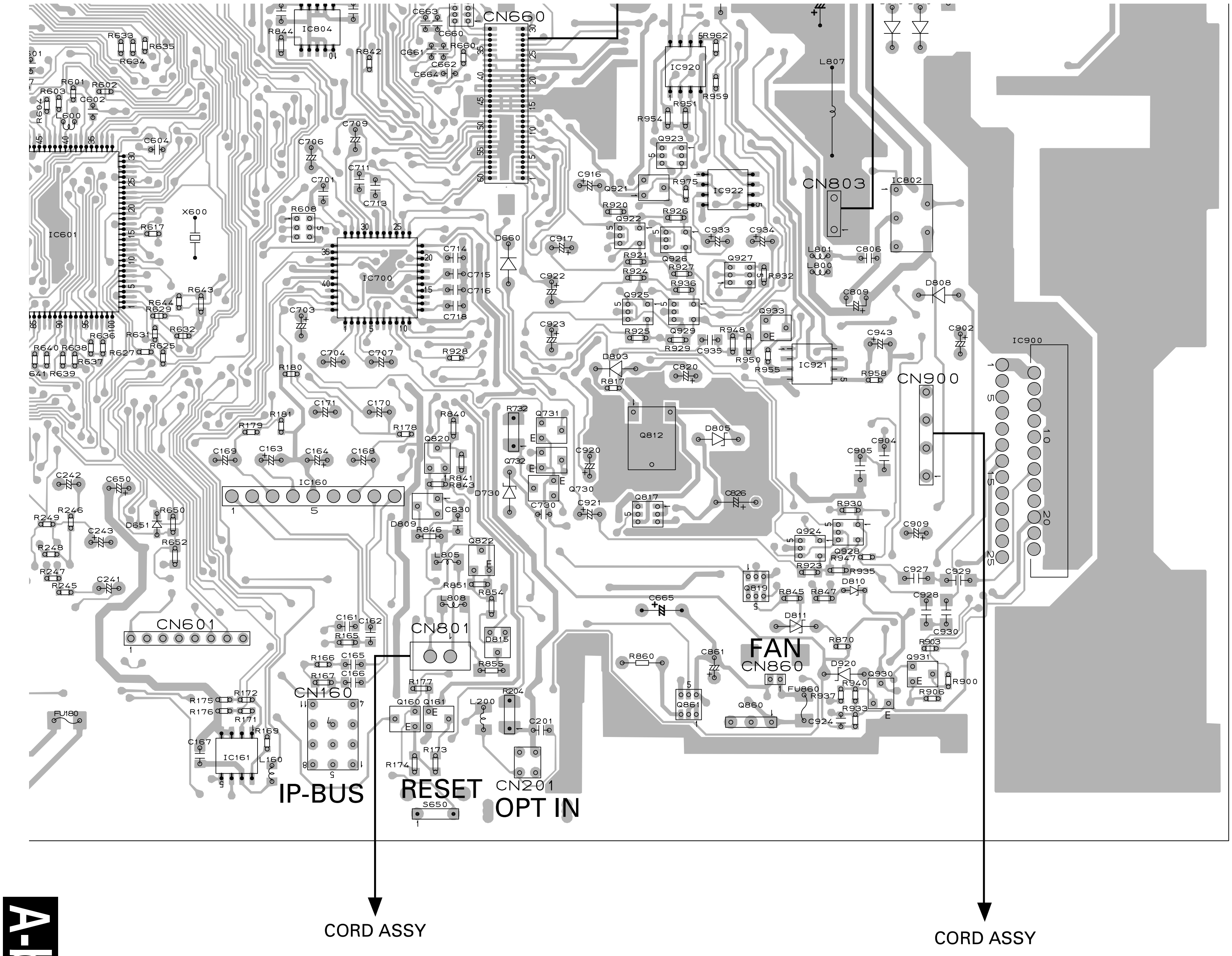
A-a	A-b


FRONT OUT R L
REAR OUT
SUB.W OUT
CN920
FRONT DISPLAY /TV TUNER
CN350
TPSV
IC351
IC350
IC263
IC681
CN661
IC267
IC266
IC265
IC500
V-SEL INFO TERMINAL
CN100
CN400
CN402
CN401
ANTENNA
L403
L415
L802
Q401
Z1
C CN1601

A TUNER AMP UNIT


DVD REMOTE
CN185
A : VIDEO IN
B : REAR DISPLAY OUT
CN101
R
L
V
A
B
NAVIGATION
CN1
DVD VIDEO IN
CN200
IC601
IC600
IC260
IC261
IC267
IC266
IC265
IC268
IC803
IC150
IC101
IC60
IC230
IC231
CN260
X260
X261
VR260
FU180
FU150
FU1
FU2
FU3
FU200
Ⓐ
B


IC,Q
Q813 Q804
IC800 IC801
Q351
Q800 IC200 IC901
Q401 IC351 Q803 Q807
Q816 Q808
Q801 Q920
Q818 Q809
Q734 Q810
Q736
Q735
Q811
Q738 Q806 IC263 Q733 IC681
IC350
IC500 Q737
Q821 Q681
IC804
IC265 IC266 IC267
CORD ASSY
A
CORD ASSY
D
CN2701
CN800
CN802
IC901
CN660
IC801
IC800
IC200
IC804
SPEAKER IN
CN202


CN660
IC804
IC920
IC922
CN803
IC802
IC601
X600
IC700
D660
IC921
CN900
IC900
Q812
IC160
CN601
CN801
CN860
FAN
CN160
IC161
IP-BUS
RESET
S650
CN201
OPT IN
FU180
CORD ASSY
CORD ASSY

IC804

IC265 IC266
IC267
IC600 IC920

Q923 IC261

Q271

Q270 IC802
Q261 Q921
IC264 IC922 Q404

Q267 IC268 Q922

IC601

Q406 Q405 Q268
Q927 Q926
Q264 IC700

Q925

IC260 Q933

Q929

IC803 IC900
VR260
IC921

Q731

Q812 Q820

Q732

IC150 IC160

Q730 Q817

Q100 Q924

Q822 IC101

Q928 IC231

IC230 Q260

Q819

IC60 Q102

Q931

Q930

Q160 Q161
Q861 Q860

IC161

A-a A-b

A-b

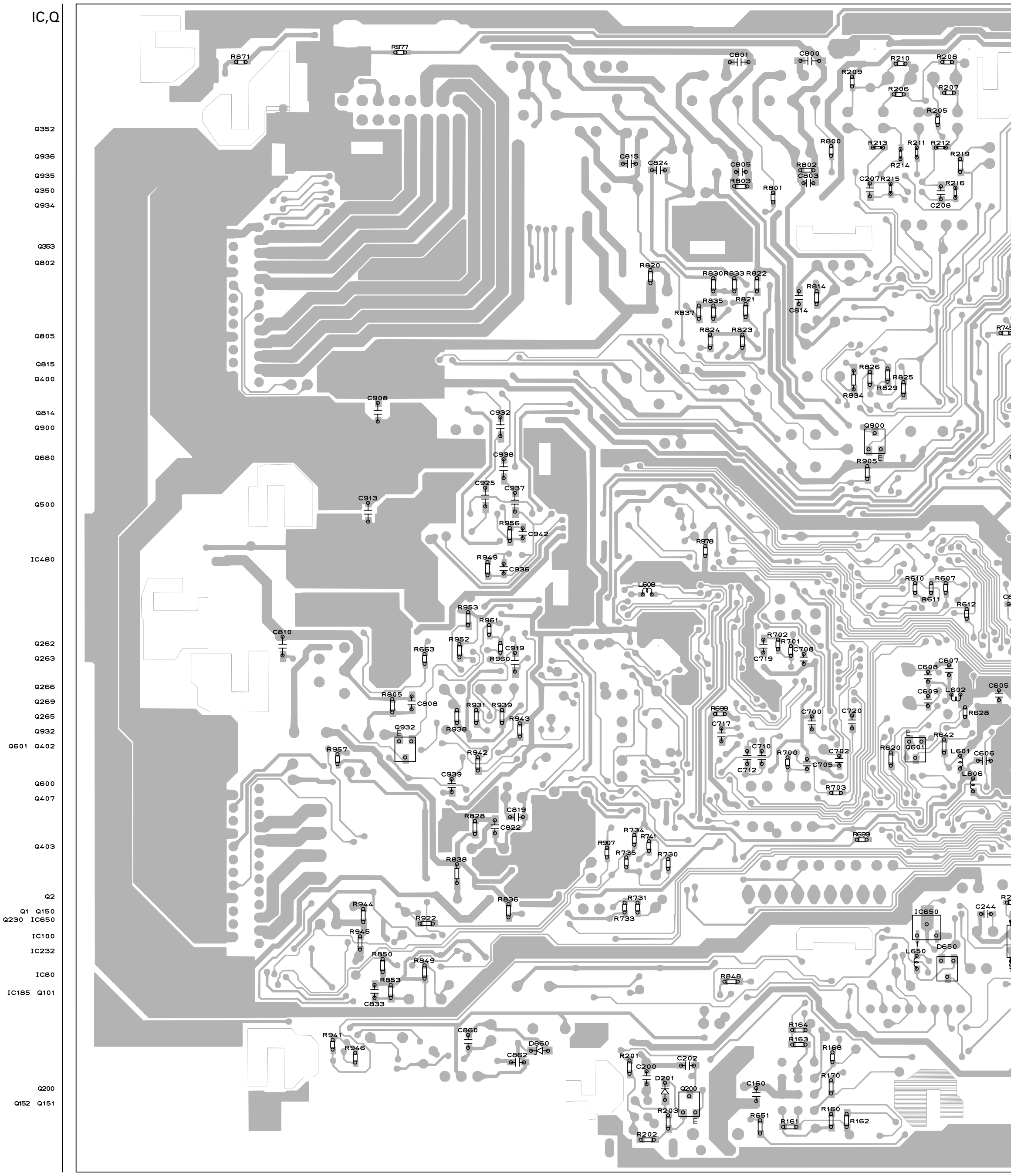
A

A-a

A TUNER AMP UNIT

B

C

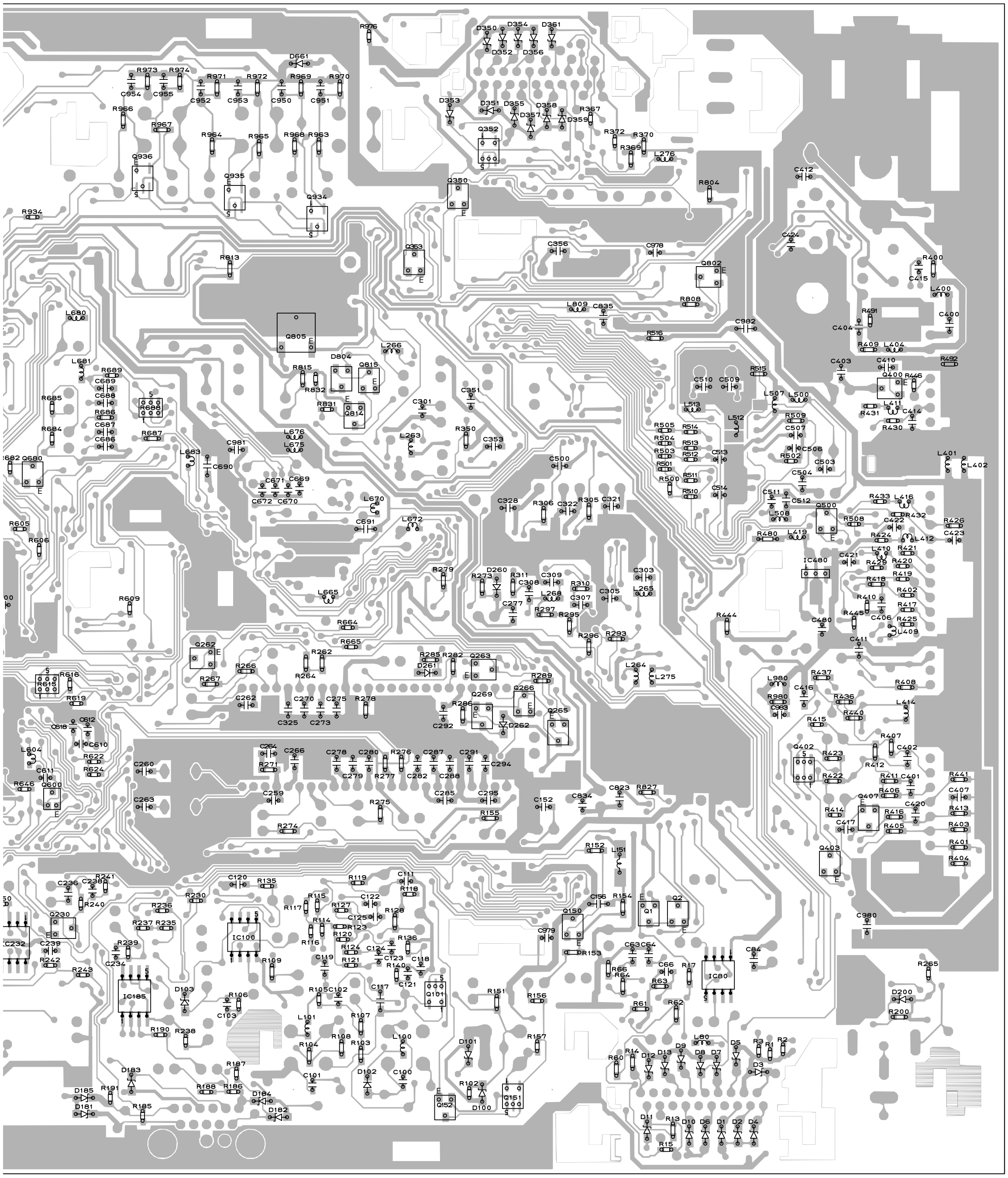

IC,Q
Q352
Q936
Q935
Q350
Q934
Q353
Q802
Q805
Q815
Q400
Q814
Q900
Q680
Q500
IC480
Q262
Q263
Q266
Q269
Q265
Q932
Q601 Q402
Q600
Q407
Q403
Q2
Q1 Q150
Q230 IC650
IC100
IC232
IC80
IC185 Q101
Q200
Q152 Q151
R871
R977
C801
C800
R210
R208
R209
R206
R207
R205
C815
C824
C805
R803
R802
C803
R800
R801
R213
R211
R212
R214
R219
C207
R215
R216
C208
R820
R830
R833
R822
R835
R821
R837
R814
C814
R824
R823
R826
R825
R834
R829
C908
C932
Q900
R905
C938
C925
C937
C913
R956
C942
R978
R949
C936
L608
R610
R607
R611
R612
R953
R961
C810
R952
C919
R663
R960
R702
R701
C719
C708
C606
C607
C609
L602
R628
R805
C808
R931
R939
R943
R938
Q932
R698
C717
C700
C720
R642
Q601
R620
C710
R700
C702
C712
C705
L601
C606
L606
R957
R942
C939
R703
C819
R828
C822
R734
R741
R907
R735
R730
R699
R838
R836
R731
R733
IC650
C244
R944
R922
R945
D650
L650
R850
R849
R853
C833
R848
R164
R163
R941
C860
D860
R946
C862
R168
R201
C202
C200
D201
Q200
R170
C160
R203
R160
R651
R161
R162
R202

D

A

A-b

SIDE B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D350 D354 D361
D352 D356
D661
R973 R974
R971 R972 R969 R970
C954 C955 C952 C953 C950 C951
D353 D351 D355 D358 R367
D357 D359
R966
R967
R964 R965 R968 R963
Q352
R372 R370
R369
L276
Q936
Q935
Q934
Q350
R804
C412
R934
C424
Q353
C356
C978
Q802
R813
R400
C415
L400
R808
L809 C835
L680
Q805
R491
C400
C404
R516
C982
R409 L404
R492
L266
D804
C403
C410
L681
R689
C689
C688
R815
Q815
R832
Q400 R446
R515
C510 C509
L507 L500
R685
C688
R686
R696
C301
C351
R831
Q814
L513
L512
R509
R431
L411
C414
R430
C687
C686
R684
R687
L676
L675
L263
R350
C353
R505 R514
R504 R513
R503 R512
C507
C506
R502
C981
C690
L683
R501
C513
C503
C500
R511
C504
L401 L402
R682 Q680
C671 C669
C672 C670
R500
R510
C514
C511 C512
L670
C328
R306 C322 R305 C321
L508
Q500
R433 L416
R432
R508
C422
R426
C423
R605
C691
L672
R480 L419
R424
L412
R606
C421 L410 R421
R428 R420
IC480
R419
R279
D260
R311
C309
R273
C308
L268
R310
C303
R418
R410
R402
L665
C305
L265
R417
R609
C277
R297
C307
R295
R445
C406
R425
R444
C480
L409
R664
R296
R293
C411
R665
C262
R262
R285 R282 Q263
R437
R266
D261
R289
L264
L275
R408
R616
R267
R264
Q266
L980
C416
R615
R619
R980
C983
R436
L414
C262
C270 C275 R278
Q269
R286
Q265
C512
R415
R440
C618
C610
C325 C273
C292
D262
R407
L604
R622
R624
C264 C266
C278 C280 R276 C287 C291
C294
Q402
R423
R412
C402
C611
C260
R271
C279 R277 C282 C288
R411 C401
R441
R646
Q600
R422
R406
C407
C263
C259
C265
C295
C152
C834
C823 R827
R275
Q407
C420
R414
R416
R413
C417
R405
R403
R274
R155
R152
L151
Q403
R401
R404
C236 C238
R241
C120 R135
R119
C111
R240
R236
R230
R115
C122
R118
C156
R154
Q2
Q1
R117
R127
R128
C125
C980
Q230
R237 R235
R114
R123
Q150
C232
C239
R239
IC100
R120
R116
R124
C124
R136
C979
R153
C63 C64
C84
R242
C234
R243
R109
C119
R121
C123
C140
C118
R66
R64
C66
R17
IC80
R265
IC185
D103
R106
C103
R105 C102
C117
C121
Q101
R151
R156
R63
D200
R61
R62
R200
L101
R107
R190 R238
R108
L100
D101
R157
L80
D5 R3 R1 R2
R104
R103
R60
R14
D12 D13
D9 D8 D7
D3
D183
R187
C101
D102
C100
R191
D185
R188 R186
D184
R102
Q152
D100
Q151
D181
R185
D182
D11 R13 D10 D6 D1 D2 D4
R15

B

C

D

A

A-b
A-a

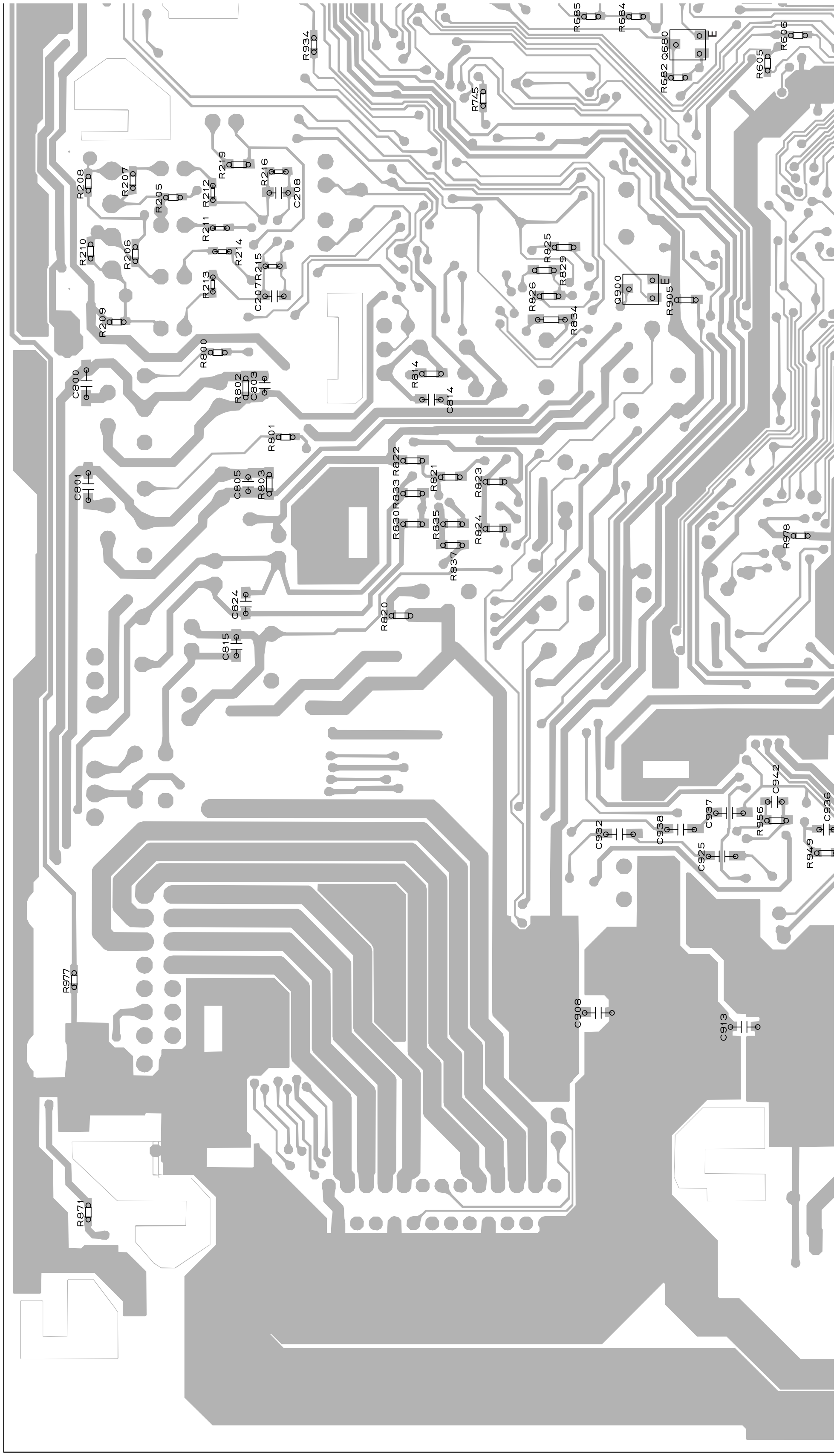
A

B

C

D

A TUNER AMP UNIT


R934
R685
R684
R606
Q680
R682
R605
E
R745
R219
R216
R208
R207
R205
R212
C208
R211
R214
R210
R206
R215
C207
R213
R825
R829
R826
R834
Q900
R905
E
R209
R800
R814
C814
C800
R802
C802
C803
R801
R822
R821
R823
C801
C805
R803
R833
R830
R835
R824
R837
R978
C824
R820
C815
C942
C937
C936
C932
C938
R956
C925
R949
R977
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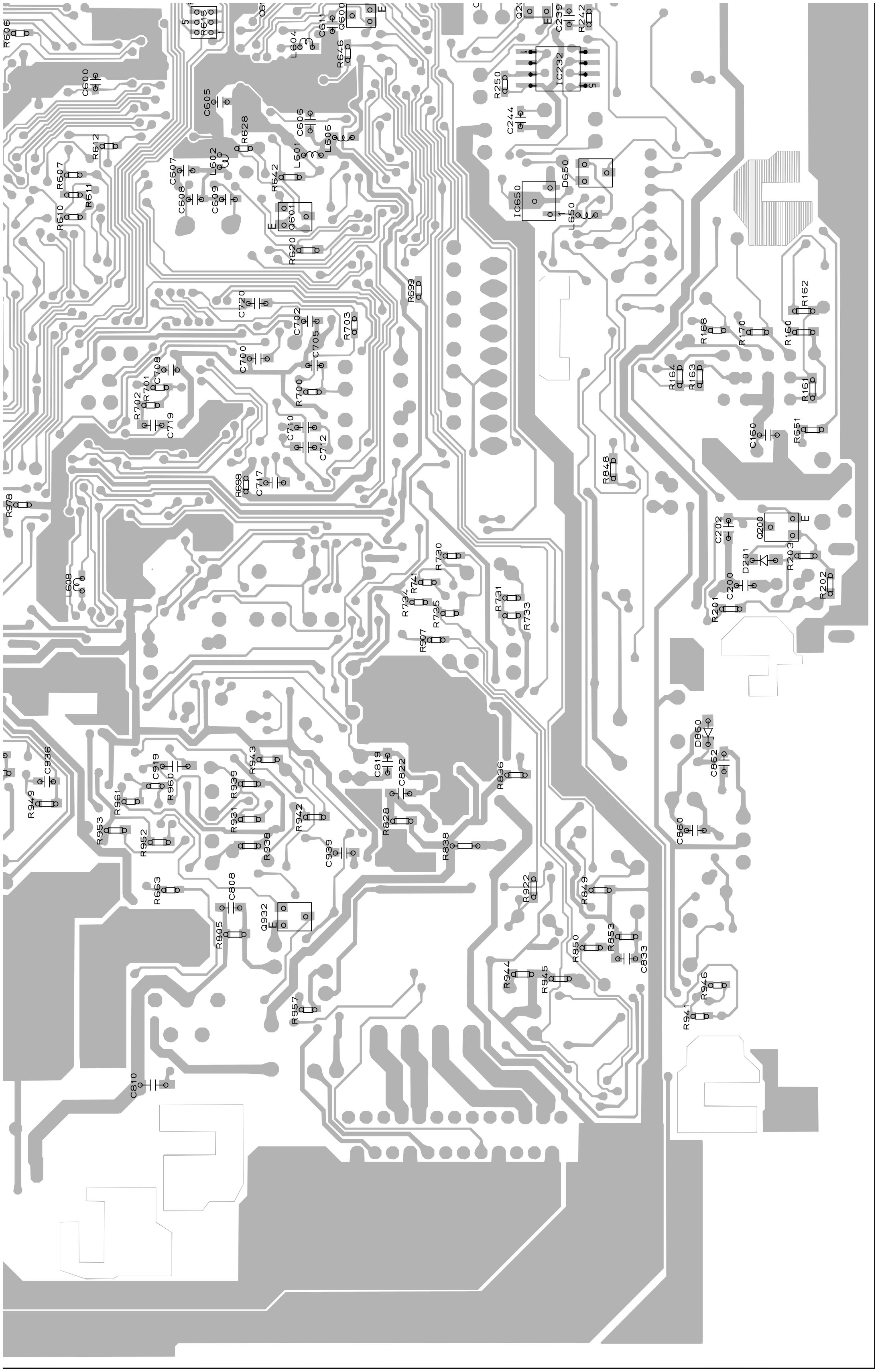
C913
R871

IC,Q

Q352 Q936 Q935 Q350 Q934 Q353 Q802 Q805 Q815 Q400 Q814 Q900 Q680 Q500 IC480

A


R606
R615
C611
Q600
E
L604
R646
C600
C605
R628
C606
L606
R612
L601
L602
C607
R607
R611
R642
C608
C609
R610
Q601
E
R620
Q2
C239
R242
IC232
R250
C244
D650
IC650
L650
R699
C720
C702
R703
C705
C700
C708
R701
R702
C719
R700
C710
C712
R698
C717
R978
L608
R730
R741
R734
R735
R731
R733
R907
R848
R162
R168
R170
R160
R164
R163
R161
C160
R651
C202
Q200
E
D201
R203
C200
R201
R202
D860
C862
C919
C936
R943
C819
C922
R836
R949
R961
R950
R939
R953
R931
R942
R828
R952
R938
C939
R838
C860
R663
C808
R922
R849
Q932
E
R805
R850
R853
C833
R944
R945
R946
R957
R941
C810

B

C

D

IC480
Q262
Q263
Q266
Q269
Q265
Q932
Q402
Q601
Q600
Q407
Q403
Q2
Q1
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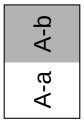
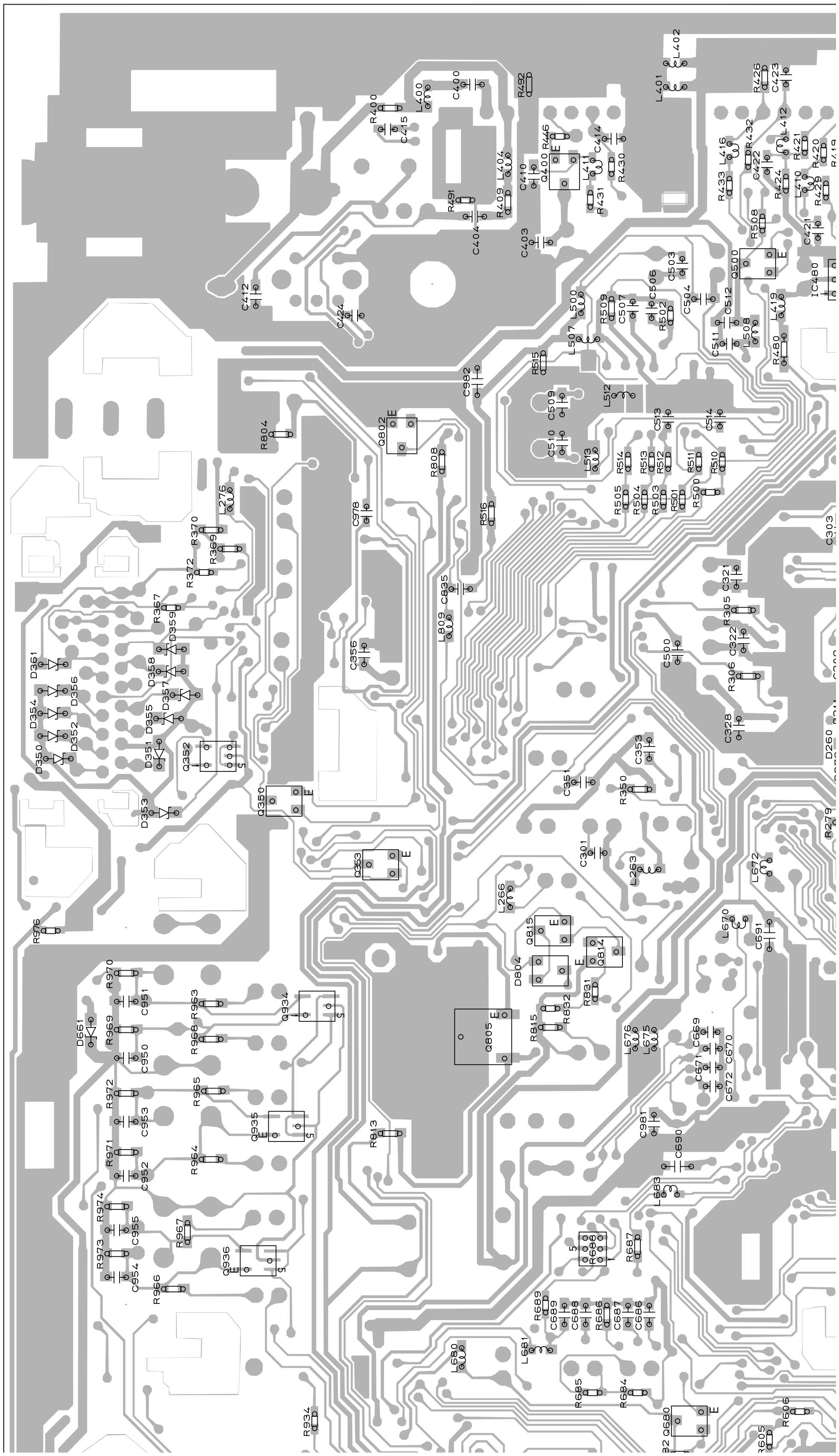
IC185
Q101
Q200
Q152
Q151



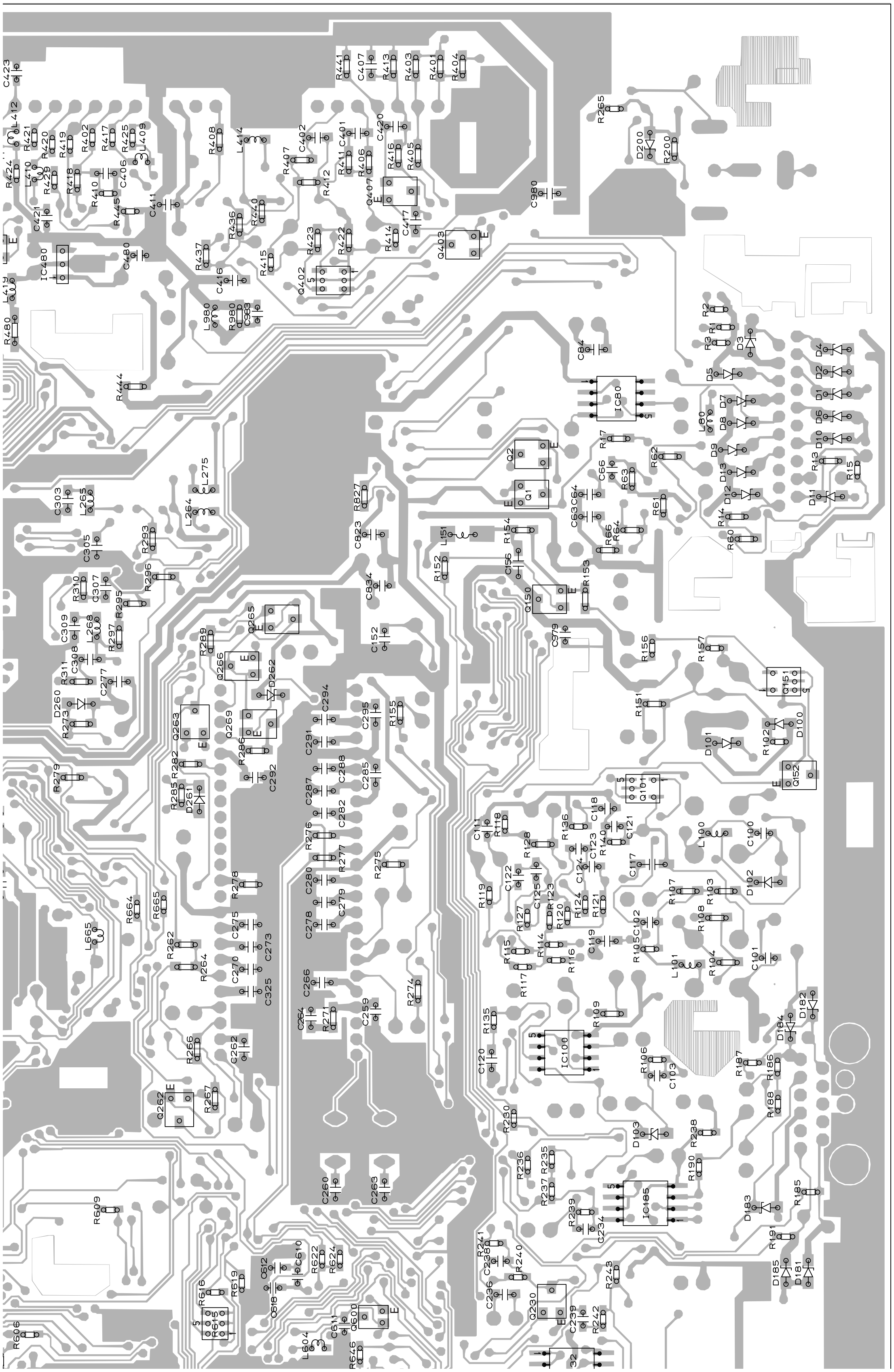
A-b
A-a



L402
L401
R492
C400
L400
R400
C415
R426
C423
R432
L412
L416
R446
C414
C410
Q400
E
L404
R409
R491
C404
L411
R430
R431
C403
R433
C422
R421
R420
R419
L410
R429
R424
R508
C421
Q500
E
IC480
C503
C506
C504
C512
C507
R509
R502
L500
L419
C511
L508
L507
R480
C412
C424
R515
C982
C509
L512
C513
C514
C510
L513
R514
R513
R512
R511
R510
Q802
E
R804
R808
R505
R504
R503
R501
R500
L276
C978
R516
R370
R369
C303
R372
C835
C321
R367
R305
D359
L809
C322
C356
C500
R306
D361
D358
D357
D356
D354
D355
D352
D350
D351
Q352
S
C328
D260
C353
C351
R350
Q350
E
D353
R279
Q353
E
C301
L263
L672
L266
L670
C691
R976
Q815
E
Q814
E
D804
R970
C951
R963
Q934
S
R969
D661
R968
C950
R832
R831
R815
Q805
E
L676
L675
C669
C670
C671
C672
R972
R965
C953
Q935
E
S
C981
R813
C690
R971
R964
C952
L683
R974
C955
R967
R973
C954
Q936
E
S
R966
R688
R687
R689
C689
C688
R686
C687
C686
L681
L680
R685
R684
Q680
E
R606
R605
R934

A-b
A-a

A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L412
R421
R420
R419
R402
R417
R425
L409
R424
L410
R429
R418
R410
C406
R445
C421
IC480
C480
L419
R480
R444
R408
L414
C411
R436
R440
R437
C416
R415
L980
R980
C983
R441
C407
R413
R403
R401
R404
C402
C401
C420
R407
R411
R412
R406
R416
R405
Q407
R423
R422
Q402
R414
C417
Q403
R365
D200
R200
C980
R2
R1
R3
D3
C84
IC80
D4
D2
D1
D6
D10
D5
D7
D8
L80
D9
D13
D12
D11
R13
R15
R17
R62
C66
R63
C63
C64
R61
R14
R60
R66
R64
Q2
Q1
R827
C823
L151
R154
R152
C156
R153
Q150
C834
C152
C379
R156
R157
Q151
R151
D101
R102
D100
Q152
Q101
C18
R136
R140
C121
C123
C117
L100
C100
D102
C111
R118
R128
C122
C124
C125
R123
R119
R127
R124
R121
R120
R107
R103
R108
R115
R114
R116
R117
C119
R105
C102
L101
R104
C101
R135
R109
IC100
C120
R106
C103
D182
D184
R187
R186
R188
D103
R238
R230
R236
R235
R237
R190
IC185
D183
R185
R239
C234
R191
R241
C238
R240
C236
Q230
R243
C239
R242
D185
D181
C303
L265
L275
L264
R293
C305
R296
R310
C307
R295
C309
L268
R297
C308
R311
C277
D260
R273
R289
Q265
Q266
D262
C294
C295
R155
Q263
Q269
R286
C291
C292
R282
C288
C285
R285
D261
R279
C287
C282
R276
R277
R275
R278
C280
C279
C278
R664
R665
L665
R262
C275
C273
R264
C270
C325
C266
R274
C264
R271
C259
R266
C262
Q262
R267
C260
C263
R609
C612
C610
R622
R624
C618
R616
R619
R615
C611
Q600
L604
R606
R646

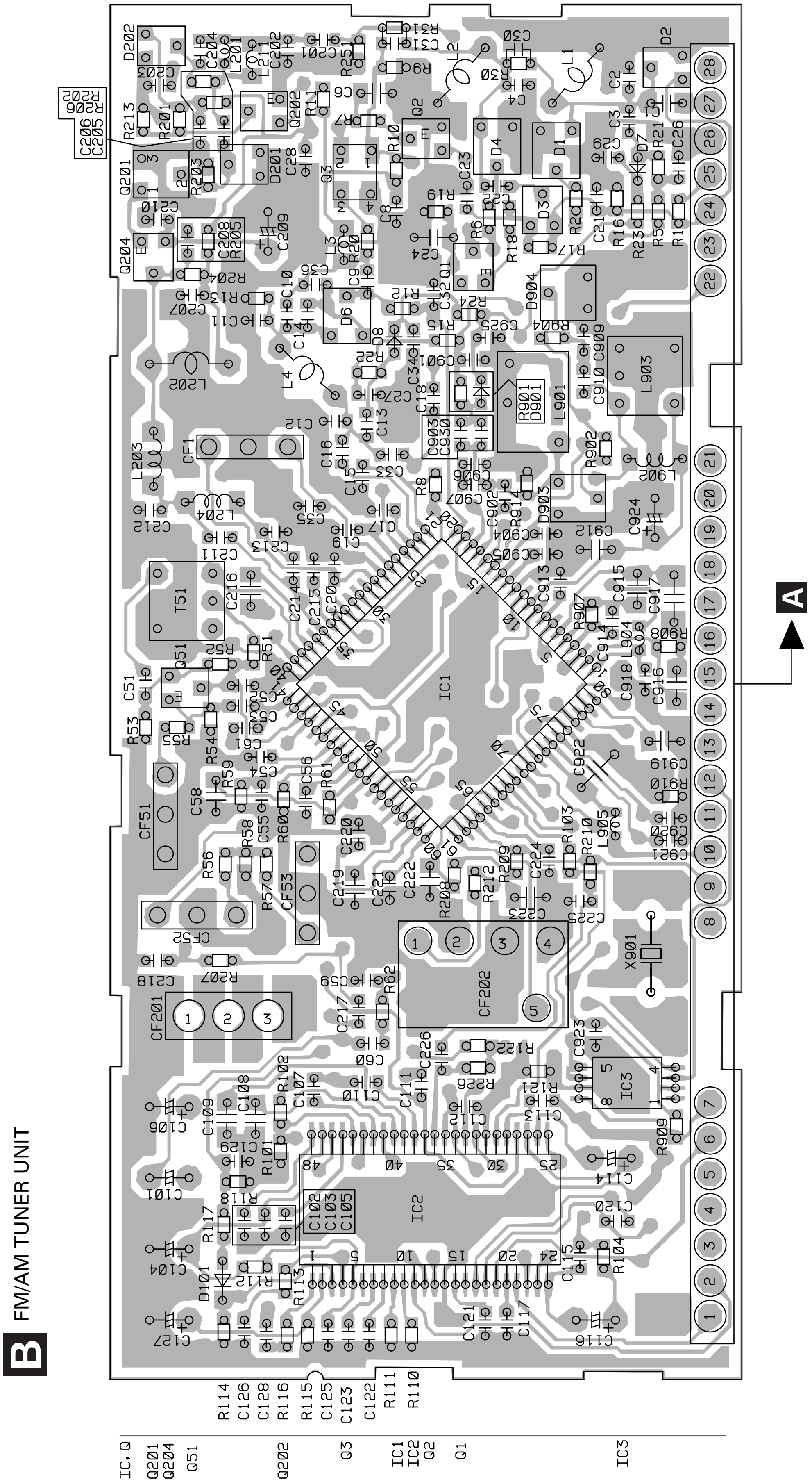
B

C

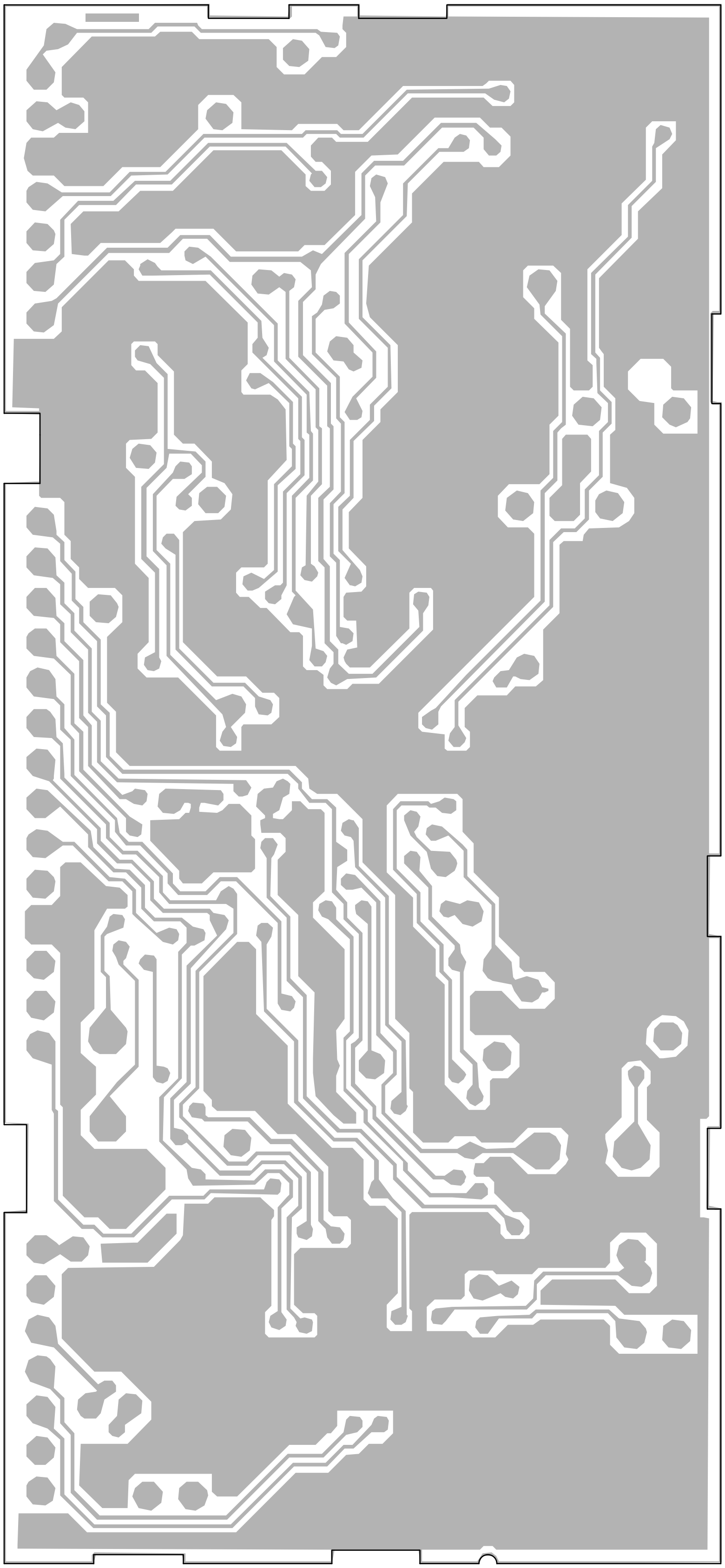
D

4.2 FM/AM TUNER UNIT

SIDE A


A
B
C
D
A
B
FM/AM TUNER UNIT
IC1
IC2
IC3
CF1
CF51
CF52
CF53
CF201
CF202
T51
L1
L2
L3
L4
L5
L202
L203
L204
L901
L903
L905
X901
D1
D2
D3
D4
D6
D7
D8
D101
D201
D202
D901
D903
D904
Q1
Q2
Q3
Q51
Q201
Q202
Q204
R114
C126
C128
R116
R115
C125
C123
C122
R111
R110
IC, Q
Q201
Q204
Q51
Q202
Q3
IC1
IC2
Q2
Q1
IC3

SIDE B



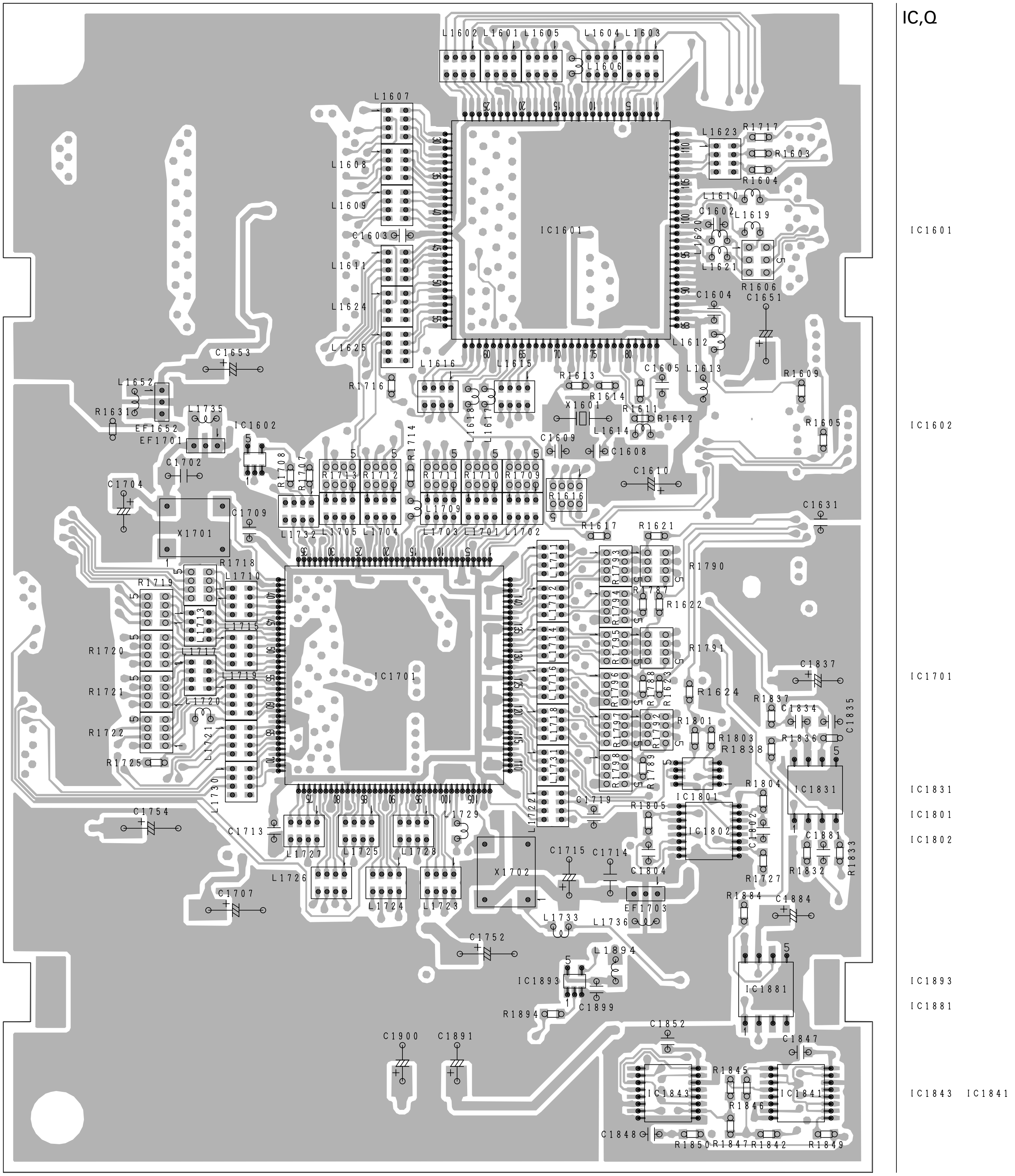
B FM/AM TUNER UNIT

4.3 GDC UNIT

SIDE A

A

C GDC UNIT


IC,Q
IC1601
IC1602
IC1701
IC1831
IC1801
IC1802
IC1893
IC1881
IC1843 IC1841
L1602 L1601 L1605 L1604 L1603
L1606
L1607
L1608
L1609
C1603
L1611
L1624
L1625
L1623
R1717
R1603
R1604
L1610
C1602
L1619
L1620
L1621
R1606
C1604
C1651
L1612
L1613
C1605
L1616
L1615
R1613
R1614
R1716
L1618
L1617
X1601
R1611
R1612
L1614
R1609
R1605
C1609
C1608
C1610
R1616
C1653
L1652
R1631
EF1652
L1735
EF1701
IC1602
C1702
C1704
R1708
R1707
R1714
R1713
R1712
R1711
R1710
R1709
L1709
L1705
L1704
L1703
L1701
L1702
L1732
X1701
C1709
R1718
R1719
L1710
L1713
L1715
L1717
L1719
L1720
L1721
L1730
R1720
R1721
R1722
R1725
IC1701
IC1601
L1711
L1712
L1714
L1716
L1718
L1731
L1722
R1617
R1621
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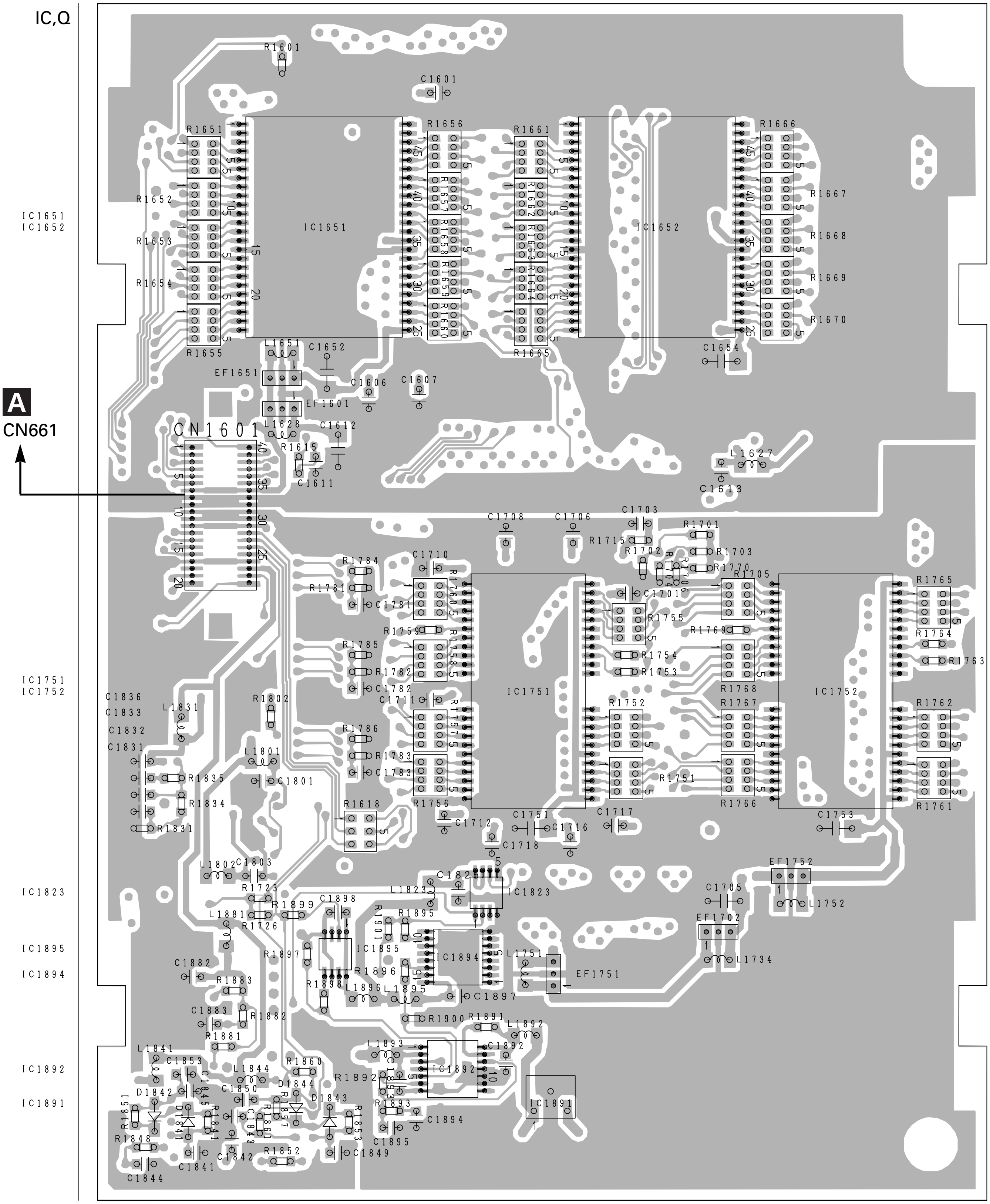
R1793
R1794
R1795
R1796
R1797
R1798
R1787
R1788
R1789
R1790
R1622
R1791
R1623
R1624
R1792
R1801
R1803
R1838
R1837
C1834
C1835
R1836
C1837
IC1831
R1804
IC1801
IC1802
R1805
C1802
C1881
R1832
R1833
R1727
C1719
C1754
C1713
L1727
L1725
L1728
L1729
L1726
L1724
L1723
X1702
C1715
C1714
C1804
EF1703
R1884
C1884
C1707
L1733
L1736
C1752
L1894
IC1893
C1899
R1894
IC1881
C1900
C1891
C1852
C1847
R1845
R1846
IC1843
IC1841
C1848
R1850
R1847
R1842
R1849

SIDE B

C GDC UNIT


IC,Q
IC1651
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IC1751
IC1752
IC1823
IC1895
IC1894
IC1892
IC1891
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CN661
CN1601
R1601
C1601
R1651
R1652
R1653
R1654
R1655
R1656
R1657
R1658
R1659
R1660
R1661
R1662
R1663
R1664
R1665
R1666
R1667
R1668
R1669
R1670
IC1651
IC1652
L1651
C1652
EF1651
C1606
C1607
EF1601
L1628
C1612
R1615
C1611
C1654
L1627
C1613
C1708
C1706
C1703
R1701
R1715
R1702
R1703
R1704
R1706
R1770
R1705
R1765
R1784
C1710
R1781
C1781
R1760
C1701
R1755
R1769
R1764
R1763
R1759
R1758
R1785
R1754
R1753
R1782
C1782
C1711
R1757
IC1751
IC1752
R1752
R1767
R1762
R1768
R1786
R1783
C1783
R1751
R1756
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R1761
R1618
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C1716
C1717
C1753
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C1833
C1832
C1831
L1831
R1802
L1801
C1801
R1835
R1834
R1831
L1802
C1803
C1825
IC1823
EF1752
R1723
L1823
C1705
L1752
C1898
R1899
L1881
R1726
R1901
R1895
EF1702
R1897
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C1882
R1896
EF1751
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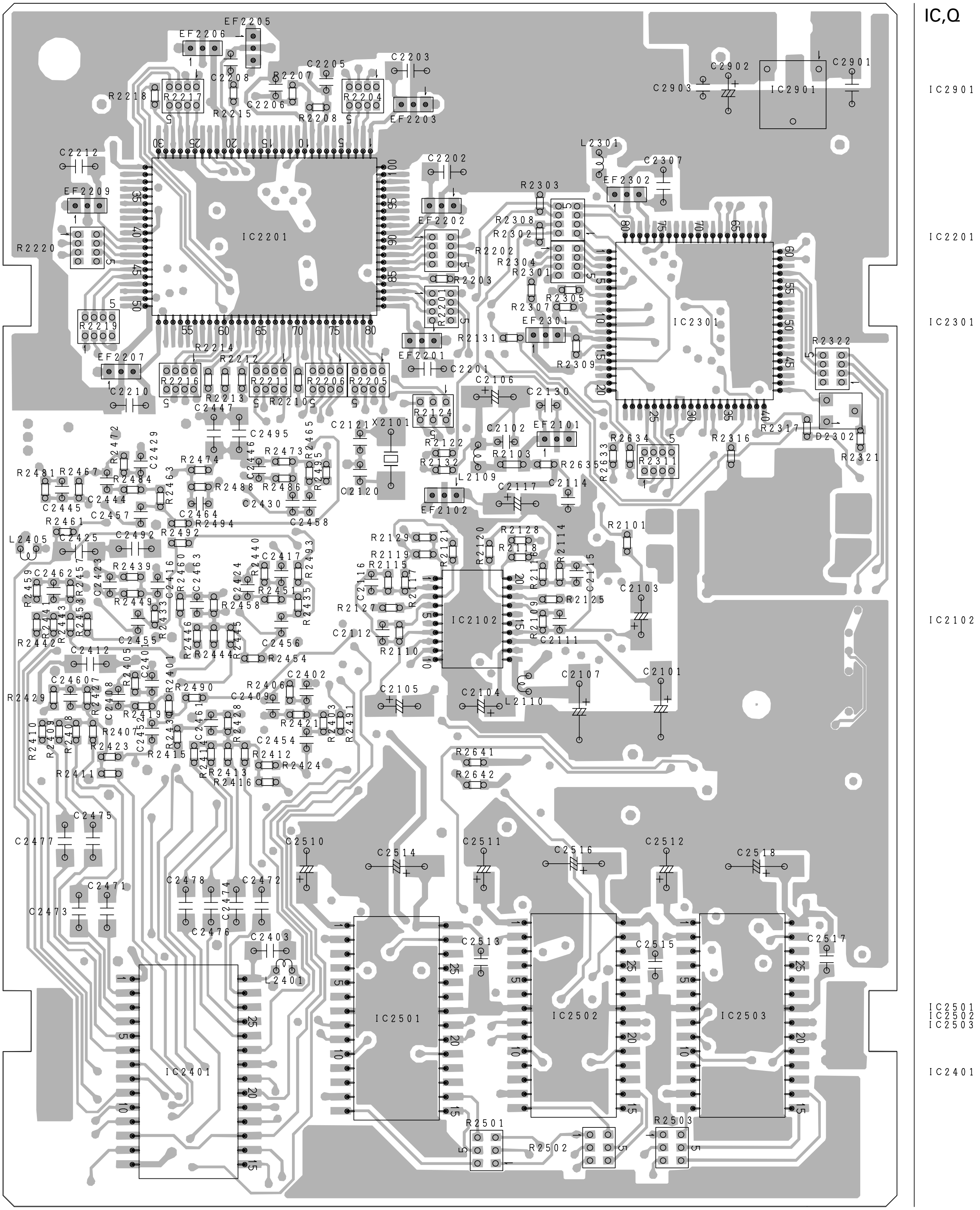
R1898
L1896
L1895
C1897
C1883
R1882
R1900
R1891
L1892
R1881
L1893
C1892
L1841
C1853
R1860
IC1892
C1845
L1844
D1844
R1892
C1893
C1850
D1842
D1841
R1857
D1843
IC1891
R1851
R1841
C1843
R1861
R1893
R1853
C1894
R1848
C1842
R1852
C1895
C1849
C1844
C1841
1
5
10
15
20
25
30
35
40
45

4.4 DSP UNIT

SIDE A

D DSP UNIT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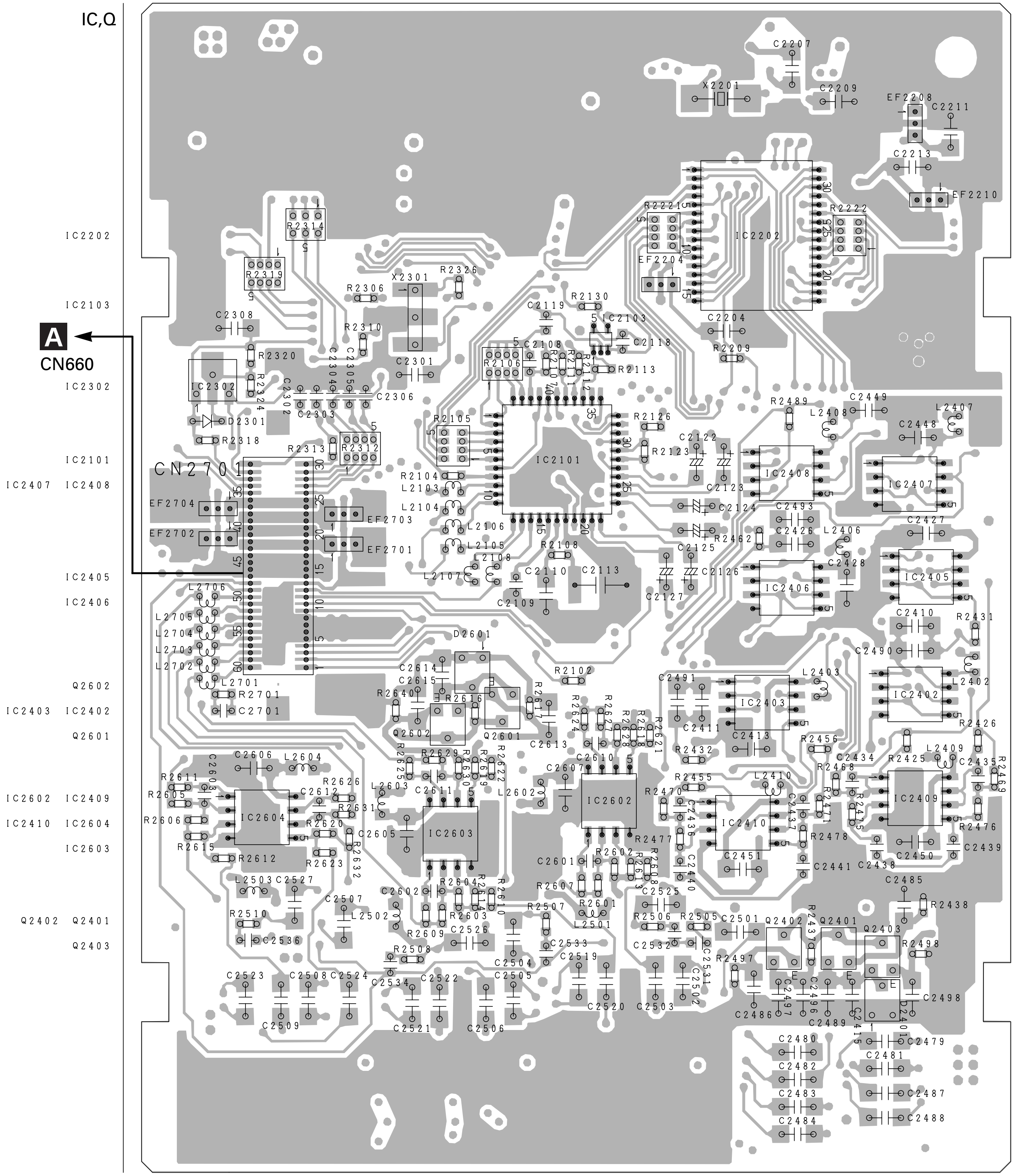
IC2301
IC2102
IC2501
IC2502
IC2503
IC2401
C2903
C2902
C2901
EF2205
EF2206
EF2203
EF2202
EF2201
EF2209
EF2207
EF2302
EF2301
EF2101
EF2102
L2301
L2109
L2110
L2405
L2401
X2101
D2302
R2501
R2502
R2503
C2510
C2511
C2512
C2513
C2514
C2515
C2516
C2517
C2518

SIDE B

D DSP UNIT


IC,Q
IC2202
IC2103
A
CN660
IC2302
IC2101
IC2407 IC2408
IC2405
IC2406
Q2602
IC2403 IC2402
Q2601
IC2602 IC2409
IC2410 IC2604
IC2603
Q2402 Q2401
Q2403
CN2701
IC2202
IC2101
IC2103
IC2302
IC2408
IC2407
IC2406
IC2405
IC2403
IC2402
IC2409
IC2410
IC2602
IC2603
IC2604
Q2602
Q2601
Q2402
Q2401
Q2403
X2201
X2301
D2301
D2601
D2401
EF2208
EF2210
EF2204
EF2704
EF2702
EF2703
EF2701

5. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/○S○○○J,RS1/○○S○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

=====Circuit Symbol & No.===Part Name Part No.

B Unit Number : CWE1501
(AVM-P9000R/UC)
(AVM-P9000/ES)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

Circuit Symbol & No.		Part Name	Part No.
IC	1	IC	PML002A
IC	2	IC	PM4008A
IC	3	IC	BR9010FV
Q	1	Transistor	2SC4081
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	51	Transistor	2SC4081
Q	201	FET	2SK932
Q	202	Transistor	DTC124EU
Q	204	Transistor	2SC4081
D	1	Diode	KV1410(23)
D	2	Diode	1SV248
D	6	Diode	KV1410(23)
D	201	Diode	DAN217U
D	202	Diode	MA147
D	903	Diode	KV1410(23)
D	904	Diode	SVC253
L	1	Coil	CTC1155
L	3	Inductor	LCTB1R5K2125
L	4	Coil	CTC1155
L	201	Inductor	LCTB330K1608
L	202	Inductor	LFEA102J
L	203	Inductor	LCTA121J3225
L	901	Coil	CTC1154
L	902	Inductor	LCTA3R3J3225
L	904	Inductor	LCTBR47K1608
L	905	Inductor	LCTBR47K1608
T	51	Coil	CTE1132
CF	51	Ceramic Filter	CTF1442
CF	52	Ceramic Filter	CTF1442
CF	53	Ceramic Filter	CTF1442
CF	202	Ceramic Filter	CTF1476
X	901	Crystal Resonator 10.250MHz	CSS1432

RESISTORS

Circuit Symbol & No.		Part Name	Part No.
R	1		RS1/16S183J
R	2		RS1/16S103J
R	5		RS1/16S0R0J
R	7		RS1/16S273J
R	8		RS1/16S473J
R	9		RS1/16S223J
R	10		RS1/16S473J
R	11		RS1/16S221J
R	12		RS1/16S103J
R	13		RS1/16S104J
R	16		RS1/16S223J
R	17		RS1/16S221J
R	18		RS1/16S221J
R	19		RS1/16S473J
R	20		RS1/16S470J
R	31		RS1/16S0R0J
R	51		RS1/16S470J
R	52		RS1/16S103J
R	53		RS1/16S103J
R	54		RS1/16S331J
R	55		RS1/16S331J
R	56		RS1/16S560J
R	57		RS1/16S560J
R	58		RS1/16S102J
R	59		RS1/16S225J
R	60		RS1/16S133J
R	61		RS1/16S433J
R	101		RS1/16S333J
R	102		RS1/16S103J
R	103		RS1/16S333J
R	104		RS1/16S562J
R	110		RS1/16S154J
R	111		RS1/16S273J
R	113		RS1/16S222J
R	114		RS1/16S333J
R	115		RS1/16S334J
R	116		RS1/16S473J
R	202		RS1/16S472J
R	203		RS1/16S225J
R	204		RS1/16S102J
R	205		RS1/16S220J
R	206		RS1/16S471J
R	208		RS1/16S104J
R	209		RS1/16S104J
R	210		RS1/16S563J
R	213		RS1/16S223J
R	251		RS1/16S225J
R	902		RS1/16S103J
R	904		RS1/16S473J
R	907		RS1/16S103J
R	908		RS1/16S681J
R	909		RS1/16S473J
R	914		RS1/16S562J

CAPACITORS

Circuit Symbol & No.		Part Name	Part No.
C	1		CCSQCH4R0C50
C	6		CKSQYB105K10
C	8		CKSRYB222K50
C	10		CCSRCH220J50
C	11		CCSRCH150J50
C	12		CCSRCH8R0D50
C	14		CCSRCJ3R0C50
C	15		CKSRYB103K50
C	16		CKSRYB222K50
C	17		CKSRYB222K50
C	18		CCSRCJ3R0C50
C	19		CKSRYB103K50
C	20		CKSRYB103K50
C	21		CKSRYB103K50
C	24		CKSQYB334K16

=====Circuit Symbol & No.===Part Name			Part No.
C	26		CKSRYB472K50
C	30		CCSRCH220J50
C	32		CCSRCH470J50
C	35		CKSRYB103K50
C	51		CKSRYB103K50
C	52		CKSRYB473K16
C	53		CCSRCK2R0C50
C	54		CKSRYB103K50
C	55		CKSRYB104K16
C	56		CKSRYB104K16
C	58		CKSQYB224K16
C	101		CEALNP100M10
C	102		CCSRCH151J50
C	103		CKSRYB473K16
C	105		CKSRYB682K25
C	106		CEALR68M50
C	107		CKSRYB103K50
C	108		CKSQYB474K16
C	109		CKSQYB474K16
C	110		CKSRYB104K16
C	111		CKSRYB104K16
C	112		CKSRYB104K16
C	113		CKSRYB123K25
C	114		CEAL220M6R3
C	115		CKSRYB473K16
C	116		CEAL2R2M50
C	117		CKSRYB102K50
C	120		CKSRYB183K25
C	121		CKSRYB332K50
C	122		CKSRYB562K25
C	123		CKSRYB681K50
C	125		CKSRYB103K50
C	126		CKSRYB103K50
C	127		CEAL2R2M50
C	128		CKSRYB103K50
C	201		CCSRCH471J50
C	202		CCSRCH100D50
C	203		CKSRYB104K16
C	204		CKSRYB332K50
C	205		CKSRYB103K50
C	206		CKSRYB104K16
C	207		CKSRYB473K16
C	208		CCSRCH560J50
C	209		CEAL470M6R3
C	210		CKSRYB103K50
C	211		CKSRYB103K50
C	212		CCSRCH101J50
C	215		CKSRYB223K25
C	216		CKSQYB334K16
C	217		CKSRYB103K50
C	219		CKSQYB105K10
C	220		CKSRYB104K16
C	221		CKSRYB473K16
C	222		CKSQYB334K16
C	223		CKSQYB474K16
C	224		CKSRYB104K16
C	225		CKSRYB272K50
C	226		CKSRYB682K25
C	902		CCSRCH270J50
C	904		CKSRYB223K25
C	905		CKSRYB103K50
C	906		CCSRTH100D50
C	907		CCSRTH150J50
C	909		CCSRTH100D50
C	910		CKSRYB332K50
C	912		CKSQYB474K16
C	913		CKSRYB223K25
C	914		CKSRYB682K25
C	915		CKSQYB223K25
C	916		CKSQYB474K16
C	917		CKSYB475K10
C	918		CKSRYB223K25
C	919		CKSQYB225K10
C	920		CCSRCH270J50
C	921		CCSRCH270J50
C	922		CKSYB105K16
C	923		CKSRYB103K50

B Unit Number : CWE1500
(AVM-P9000R/EW)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

IC	1	IC	PML002A
IC	2	IC	PM4008A
IC	3	IC	BR9010FV
Q	1	Transistor	2SC4081
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	51	Transistor	2SC4081
Q	201	FET	2SK932
Q	202	Transistor	DTC124EU
Q	204	Transistor	2SC4081
D	1	Diode	KV1410(23)
D	2	Diode	1SV248
D	4	Diode	KV1410(23)
D	6	Diode	KV1410(23)
D	101	Diode	1SS355
D	201	Diode	DAN217U
D	202	Diode	MA147
D	903	Diode	KV1410(23)
D	904	Diode	SVC253
L	1	Coil	CTC1155
L	2	Coil	CTC1155
L	3	Inductor	LCTB100K2125
L	4	Coil	CTC1155
L	201	Inductor	LCTB330K1608
L	202	Inductor	CTF1287
L	203	Inductor	LCTA121J3225
L	901	Coil	CTC1154
L	902	Inductor	LCTA3R3J3225
L	904	Inductor	LCTBR47K1608
L	905	Inductor	LCTBR47K1608
T	51	Coil	CTE1133
CF	51	Ceramic Filter	CTF1442
CF	52	Ceramic Filter	CTF1442
CF	53	Ceramic Filter	CTF1442
CF	202	Ceramic Filter	CTF1476
X	901	Crystal Resonator 10.250MHz	CSS1432

RESISTORS

R	1		RS1/16S153J
R	2		RS1/16S103J
R	6		RS1/16S103J
R	7		RS1/16S273J
R	8		RS1/16S473J
R	9		RS1/16S223J
R	10		RS1/16S473J
R	11		RS1/16S221J
R	12		RS1/16S103J
R	13		RS1/16S104J

=====Circuit Symbol & No.===Part Name		Part No.
R	16	RS1/16S223J
R	17	RS1/16S221J
R	18	RS1/16S221J
R	19	RS1/16S473J
R	20	RS1/16S470J
R	51	RS1/16S470J
R	52	RS1/16S103J
R	53	RS1/16S103J
R	54	RS1/16S331J
R	55	RS1/16S331J
R	56	RS1/16S560J
R	57	RS1/16S560J
R	58	RS1/16S102J
R	59	RS1/16S225J
R	60	RS1/16S133J
R	61	RS1/16S433J
R	62	RS1/16S562J
R	101	RS1/16S333J
R	102	RS1/16S103J
R	103	RS1/16S333J
R	104	RS1/16S562J
R	110	RS1/16S154J
R	111	RS1/16S273J
R	112	RS1/16S223J
R	113	RS1/16S222J
R	114	RS1/16S333J
R	115	RS1/16S334J
R	116	RS1/16S473J
R	117	RS1/16S333J
R	118	RS1/16S223J
R	122	RS1/16S0R0J
R	202	RS1/16S472J
R	203	RS1/16S225J
R	204	RS1/16S102J
R	205	RS1/16S220J
R	206	RS1/16S471J
R	208	RS1/16S104J
R	209	RS1/16S104J
R	210	RS1/16S563J
R	213	RS1/16S223J
R	251	RS1/16S225J
R	902	RS1/16S103J
R	904	RS1/16S473J
R	907	RS1/16S103J
R	908	RS1/16S681J
R	909	RS1/16S473J
R	914	RS1/16S562J

CAPACITORS

C	1	CCSQCH5R0C50
C	2	CCSRCH5R0C50
C	4	CCSRCJ3R0C50
C	6	CKSQYB105K10
C	8	CKSRYB222K50
C	10	CCSRCH220J50
C	11	CCSRCH150J50
C	12	CCSRCH8R0D50
C	14	CCSRCJ3R0C50
C	15	CKSRYB103K50
C	16	CKSRYB222K50
C	17	CKSRYB222K50
C	18	CCSRCJ3R0C50
C	19	CKSRYB103K50
C	20	CKSRYB103K50

=====Circuit Symbol & No.===Part Name		Part No.
C	21	CKSRYB103K50
C	24	CKSQYB334K16
C	31	CKSRYB222K50
C	32	CCSRCH470J50
C	35	CKSRYB103K50
C	51	CKSRYB103K50
C	52	CKSRYB473K16
C	53	CCSRCK2R0C50
C	54	CKSRYB103K50
C	55	CKSRYB104K16
C	56	CKSRYB104K16
C	58	CKSQYB224K16
C	59	CKSRYB223K25
C	60	CKSRYB104K16
C	101	CEALNP100M10
C	102	CCSRCH151J50
C	103	CKSRYB473K16
C	105	CKSRYB682K25
C	106	CEAL2R2M50
C	107	CKSRYB103K50
C	108	CKSQYB474K16
C	109	CKSQYB474K16
C	110	CKSRYB104K16
C	111	CKSRYB104K16
C	112	CKSRYB104K16
C	113	CKSRYB123K25
C	114	CEAL220M6R3
C	115	CKSRYB473K16
C	116	CEAL2R2M50
C	117	CKSRYB102K50
C	120	CKSRYB153K25
C	121	CKSRYB332K50
C	122	CKSRYB682K25
C	123	CKSRYB681K50
C	125	CKSRYB103K50
C	126	CKSRYB103K50
C	127	CEAL2R2M50
C	128	CKSRYB103K50
C	201	CCSRCH471J50
C	202	CCSRCH100D50
C	203	CKSRYB104K16
C	204	CKSRYB332K50
C	205	CKSRYB103K50
C	206	CKSRYB104K16
C	207	CKSRYB473K16
C	208	CCSRCH560J50
C	209	CEAL470M6R3
C	210	CKSRYB103K50
C	211	CKSRYB103K50
C	212	CCSRCH101J50
C	215	CKSRYB223K25
C	216	CKSQYB334K16
C	217	CKSRYB103K50
C	219	CKSQYB105K10
C	220	CKSRYB104K16
C	221	CKSRYB473K16
C	222	CKSQYB334K16
C	223	CKSQYB474K16
C	224	CKSRYB104K16
C	225	CKSRYB272K50
C	226	CKSRYB682K25
C	902	CCSRCH270J50
C	904	CKSRYB223K25
C	905	CKSRYB103K50
C	906	CCSRTH100D50

=====Circuit Symbol & No.		===Part Name	Part No.
C	907		CCSRTH150J50
C	909		CCSRTH100D50
C	910		CKSRYB332K50
C	912		CKSQYB474K16
C	913		CKSRYB223K25
C	914		CKSRYB682K25
C	915		CKSQYB223K25
C	916		CKSQYB474K16
C	917		CKSYB475K10
C	918		CKSRYB223K25
C	919		CKSQYB225K10
C	920		CCSRCH270J50
C	921		CCSRCH270J50
C	922		CKSYB105K16
C	923		CKSRYB103K50

A Unit Number : CWM7150 (AVM-P9000R/UC)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

=====Circuit Symbol & No.		===Part Name	Part No.
IC	60	IC	NJM4558MD
IC	100	IC	BA3121F
IC	101	IC	BA3129F
IC	150	IC	NJM2246M
IC	160	IC	TA2050S
IC	161	IC	CA0008AM
IC	185	IC	NJM4558MD
IC	200	IC	NJM4558MD
IC	230	IC	NJM4558MD
IC	231	IC	TDA7052BT
IC	232	IC	NJM4558MD
IC	260	IC	CXA2061S
IC	261	IC	TC74VHC123AFT
IC	263	IC	NJM2235V
IC	264	IC	TC7SH04FU
IC	265	IC	NJM2246M
IC	266	IC	NJM2246M
IC	267	IC	NJM2246M
IC	268	IC	TC7SH04FU
IC	350	IC	NJM2267M
IC	351	IC	BA7623F
IC	480	IC	S-81250SGUP
IC	500	IC	PM4009A
IC	600	IC	PDH027A
IC	601	IC	PE5154A
IC	650	IC	S-80734ANDYI
IC	681	IC	BA3834F
IC	800	IC	BA05ST-V5
IC	801	IC	BA05ST-V5
IC	802	IC	BA05ST-V5
IC	803	IC	BA09SFP
IC	900	IC	PAL005A
IC	901	IC	PAL005A
IC	920	IC	NJU7032M
IC	921	IC	NJM2068MD
IC	922	IC	NJU7032M
Q	1	Transistor	2SC2412K
Q	2	Transistor	DTA114EK
Q	100	Transistor	DTC124EK
Q	101	Transistor	FMG12
Q	102	Transistor	DTA114EK
Q	150	Transistor	2SA1037K
Q	151	Transistor	FMG12
Q	152	Transistor	DTA114EK
Q	160	Transistor	2SA1037K
Q	161	Transistor	DTC124EK
Q	200	Transistor	2SC2412K
Q	230	Transistor	DTC124EK
Q	261	Transistor	2SA1037K
Q	262	Transistor	2SC2412K
Q	263	Transistor	2SC2412K
Q	264	Transistor	2SC2412K
Q	265	Transistor	2SC2412K
Q	266	Transistor	2SA1037K
Q	267	Transistor	2SA1037K
Q	268	Transistor	2SC2412K
Q	269	Transistor	2SA1037K
Q	270	Transistor	2SA1037K
Q	271	Transistor	2SA1037K
Q	350	Transistor	DTA143EK
Q	351	Transistor	DTC323TU
Q	352	Transistor	FMG12
Q	353	Transistor	DTA114EK
Q	400	Transistor	2SC2412K
Q	500	Transistor	DTA124EK
Q	600	Transistor	DTA144EU
Q	601	Transistor	2SC2412K
Q	680	Transistor	2SC2412K
Q	681	Transistor	DTC124TK
Q	730	Transistor	2SC2412K
Q	731	Transistor	DTC144EK
Q	732	Transistor	2SC2412K
Q	733	Transistor	2SC2412K
Q	734	Transistor	DTC124EK
Q	735	Transistor	2SA1037K
Q	736	Transistor	IMD2A
Q	737	Transistor	DTA124EU
Q	738	Transistor	2SC2412K
Q	800	Transistor	DTA124EK
Q	801	Transistor	2SA1797
Q	802	Transistor	DTC114EK
Q	803	Transistor	2SD1857
Q	804	Transistor	2SD2396
Q	805	Transistor	2SB1184F5
Q	806	Transistor	2SC2412K
Q	807	Transistor	2SA1797
Q	808	Transistor	2SA1797
Q	809	Transistor	DTC144EK
Q	810	Transistor	2SC2412K
Q	811	Transistor	2SA1037K
Q	812	Transistor	2SD1760F5
Q	813	Transistor	2SD2396
Q	814	Transistor	2SC2412K
Q	815	Transistor	DTA124EK
Q	816	Transistor	2SA1037K
Q	817	Transistor	IMD2A
Q	818	Transistor	DTC144EK
Q	819	Transistor	IMX1
Q	820	Transistor	2SA1037K
Q	821	Transistor	DTC124EK
Q	822	Transistor	2SA1037K
Q	860	Transistor	2SD1859
Q	861	Transistor	IMD3A
Q	900	Transistor	DTC114TK
Q	920	Transistor	IMD2A
Q	921	Transistor	DTA124EK
Q	922	Transistor	FMG12
Q	923	Transistor	IMD2A
Q	924	Transistor	FMG12
Q	925	Transistor	FMG12

=====Circuit Symbol & No.		===Part Name	Part No.
Q	926	Transistor	FMG12
Q	927	Transistor	IMH3A
Q	928	Transistor	FMG12
Q	929	Transistor	FMG12
Q	932	Transistor	DTC323TK
Q	933	Transistor	DTC323TK
Q	934	Transistor	FMG13
Q	935	Transistor	FMG13
Q	936	Transistor	FMG13
D	1	Diode	UDZ12(B)
D	2	Diode	UDZ12(B)
D	3	Diode	UDZ12(B)
D	4	Diode	UDZ12(B)
D	6	Diode	UDZ12(B)
D	7	Diode	UDZ12(B)
D	9	Diode	UDZ12(B)
D	10	Diode	UDZ12(B)
D	11	Diode	UDZ12(B)
D	12	Diode	UDZ12(B)
D	13	Diode	UDZ12(B)
D	100	Diode	UDZ12(B)
D	101	Diode	UDZ12(B)
D	102	Diode	MA110
D	103	Diode	UDZ12(B)
D	185	Diode	UDZ12(B)
D	200	Diode	UDZ12(B)
D	201	Diode	MA110
D	260	Diode	MA110
D	261	Diode	MA110
D	262	Diode	MA8039(H)
D	263	Diode	MA152WK
D	350	Diode	UDZ12(B)
D	351	Diode	UDZ12(B)
D	352	Diode	UDZ12(B)
D	353	Diode	UDZ12(B)
D	354	Diode	UDZ12(B)
D	355	Diode	UDZ12(B)
D	357	Diode	UDZ12(B)
D	358	Diode	UDZ12(B)
D	359	Diode	UDZ12(B)
D	360	Diode	UDZ12(B)
D	361	Diode	UDZ12(B)
D	480	Diode	HZS16L(1)
D	650	Diode	MA152WK
D	651	Diode	MA110
D	660	Diode	1SS133
D	661	Diode	UDZ12(B)
D	730	Diode	HZS9L(A2)
D	731	Diode	MA111
D	732	Diode	HZS9L(A2)
D	733	Diode	MA152WK
D	734	Diode	MA152WK
D	800	Diode	ERA15-02VH
D	801	Diode	HZS6L(B1)
D	802	Diode	HZS9L(B3)
D	803	Diode	1SS133
D	804	Diode	MA152WK
D	805	Diode	HZS6L(C3)
D	806	Diode	HZS9L(B3)
D	807	Diode	MA152WK
D	808	Diode	ERA15-02VH
D	809	Diode	MA152WK
D	810	Diode	UDZ7R5(B)
D	811	Diode	HZS7L(A1)
D	814	Diode	ERA15-02VH
D	815	Diode	MA152WK
D	816	Diode	ERA15-02VH
D	817	Diode	ERA15-02VH
D	818	Diode	ERA15-02VH
D	819	Diode	ERA15-02VH
D	820	Diode	ERA15-02VH
D	821	Diode	ERA15-02VH
D	823	Diode	1SR154-400
D	824	Diode	1SR154-400
D	825	Diode	1SR154-400
D	826	Diode	1SR154-400
D	860	Diode	UDZ12(B)
D	921	Diode	MA152WK
L	1	Inductor	CTF1305
L	2	Inductor	CTF1305
L	3	Inductor	CTF1305
L	4	Inductor	CTF1305
L	100	Inductor	LCTB2R2K2125
L	101	Inductor	LCTB2R2K2125
L	150	Inductor	LCTB4R7K2125
L	151	Inductor	LCTA220J3225
L	160	Inductor	LCTB3R3K2125
L	200	Inductor	LCTA1R5J3225
L	260	Chip-Inductor	LCTA2R2J3225
L	261	Chip-Inductor	LCTA2R2J3225
L	263	Inductor	CTF1305
L	264	Inductor	CTF1305
L	265	Inductor	LCTB2R2K2125
L	266	Inductor	CTF1305
L	267	Inductor	LCTB2R2K2125
L	268	Inductor	LCTB2R2K2125
L	269	Inductor	CTF1306
L	270	Inductor	LCTB4R7K2125
L	271	Inductor	LCTB4R7K2125
L	272	Inductor	LCTB4R7K2125
L	274	Inductor	LCTB100K2125
L	275	Inductor	CTF1305
L	276	Inductor	CTF1399
L	350	Inductor	LCTA680J3225
L	351	Inductor	LCTA680J3225
L	353	Inductor	CTF1305
L	355	Inductor	CTF1305
L	356	Inductor	CTF1305
L	357	Inductor	CTF1305
L	358	Inductor	CTF1399
L	359	Inductor	CTF1399
L	400	Inductor	LCTB4R7K2125
L	408	Inductor	CTF1399
L	409	Inductor	CTF1306
L	410	Inductor	CTF1306
L	411	Inductor	CTF1306
L	412	Inductor	CTF1306
L	413	Chip-Inductor	LCTA2R2J3225
L	418	Ferri-Inductor	LAU2R2K
L	419	Inductor	CTF1399
L	500	Inductor	CTF1409
L	501	Inductor	CTF1409
L	507	Inductor	CTF1420
L	508	Inductor	CTF1409
L	509	Inductor	CTF1306
L	510	Inductor	CTF1306
L	512	Inductor	CTF1409
L	513	Inductor	CTF1409
L	600	Inductor	CTF1306
L	601	Inductor	CTF1420

=====Circuit Symbol & No.		===Part Name	Part No.
L	602	Inductor	CTF1470
L	603	Inductor	CTF1306
L	604	Inductor	CTF1306
L	605	Inductor	CTF1399
L	606	Inductor	CTF1399
L	607	Inductor	CTF1306
L	608	Inductor	CTF1410
L	650	Inductor	CTF1399
L	660	Inductor-Array	CTF1421
L	661	Inductor-Array	CTF1421
L	662	Inductor	CTF1306
L	663	Inductor	CTF1306
L	664	Inductor	CTF1306
L	665	Inductor	CTF1306
L	666	Inductor	CTF1409
L	668	Inductor	CTF1306
L	669	Inductor	CTF1306
L	670	Inductor	CTF1306
L	672	Inductor	CTF1306
L	673	Inductor	CTF1409
L	674	Inductor	CTF1409
L	675	Inductor	CTF1409
L	676	Inductor	CTF1409
L	677	Inductor	CTF1306
L	680	Inductor	CTF1399
L	681	Inductor	CTF1399
L	682	Inductor-Array	CTF1421
L	683	Inductor	CTF1306
L	800	Inductor	CTF1420
L	801	Inductor	CTF1420
L	802	Choke Coil 100µH	CTH1157
L	803	Choke Coil 390mH	CTH1209
L	804	Ferri-Inductor	LAU2R2K
L	805	Chip-Inductor	LCTA2R2J3225
L	806	Choke Coil 600mH	CTH1171
L	807	Choke Coil 600mH	CTH1171
L	808	Chip-Inductor	LCTA2R2J3225
L	809	Inductor	CTF1399
L	810	Inductor	CTF1489
L	980	Inductor	CTF1409
X	261	Crystal Resonator 3.579545MHz	CSS1465
X	500	Crystal Resonator 3.648MHz	CSS1447
X	600	Radiator 12.5829MHz	CSS1495
S	650	Switch(RESET)	CSG1046
VR	260	Semi-fixed 100kΩ(B)	CCP1133
FU	1	Micro-Fuse 2A	CEK1190
FU	2	Micro-Fuse 2A	CEK1190
FU	3	Micro-Fuse 2A	CEK1190
FU	100	Micro-Fuse 2A	CEK1190
FU	150	Micro-Fuse 2A	CEK1190
FU	180	Micro-Fuse 2A	CEK1190
FU	200	Micro-Fuse 2A	CEK1190
FU	350	Micro-Fuse 2A	CEK1190
FU	351	Micro-Fuse 2A	CEK1190
FU	352	Micro-Fuse 2A	CEK1190
FU	800	Micro-Fuse 800mA	CEK1206
FU	801	Micro-Fuse 2A	CEK1190
FU	860	Micro-Fuse 400mA	CEK1184
		DSP Unit	CWM7147
		FM/AM Tuner Unit	CWE1501
		GDC Unit	CWM7146
AR	400	Surge Protector	DSPS-201M-S00B

=====Circuit Symbol & No.		===Part Name	Part No.

RESISTORS

R	1		RS1/16S750J
R	2		RS1/16S750J
R	3		RS1/16S750J
R	4		RS1/16S0R0J
R	5		RS1/16S750J
R	7		RS1/16S0R0J
R	9		RS1/16S0R0J
R	10		RS1/16S0R0J
R	11		RS1/16S0R0J
R	15		RS1/16S0R0J
R	16		RS1/10S0R0J
R	17		RS1/10S332J
R	18		RS1/10S333J
R	19		RS1/10S104J
R	20		RS1/10S473J
R	60		RS1/10S101J
R	61		RS1/10S473J
R	62		RS1/10S473J
R	63		RS1/10S563J
R	64		RS1/10S563J
R	65		RS1/10S473J
R	66		RS1/10S473J
R	100		RS1/10S0R0J
R	101		RS1/10S0R0J
R	102		RS1/16S750J
R	103		RS1/10S123J
R	104		RS1/10S123J
R	105		RS1/16S123J
R	106		RS1/16S123J
R	107		RS1/10S102J
R	108		RS1/10S102J
R	109		RS1/10S220J
R	110		RS1/16S0R0J
R	111		RS1/16S0R0J
R	112		RS1/16S102J
R	113		RS1/16S102J
R	114		RS1/16S104J
R	115		RS1/16S104J
R	116		RS1/16S104J
R	117		RS1/16S104J
R	118		RS1/16S123J
R	119		RS1/16S133J
R	120		RS1/16S473J
R	121		RS1/16S153J
R	122		RS1/16S153J
R	123		RS1/16S473J
R	124		RS1/16S362J
R	125		RS1/16S223J
R	126		RS1/16S223J
R	127		RS1/16S362J
R	128		RS1/10S220J
R	129		RS1/10S821J
R	130		RS1/10S821J
R	131		RS1/16S104J
R	132		RS1/16S473J
R	133		RS1/16S0R0J
R	135		RS1/16S0R0J
R	136		RS1/16S223J
R	137		RS1/16S0R0J
R	140		RS1/16S223J
R	150		RS1/10S471J
R	151		RS1/10S471J
R	152		RS1/10S681J
R	153		RS1/10S0R0J
R	154		RS1/10S101J

=====Circuit Symbol & No.===Part Name			Part No.
R	155		RS1/10S0R0J
R	156		RS1/16S270J
R	157		RS1/16S330J
R	160		RS1/10S101J
R	161		RS1/10S620J
R	162		RS1/10S101J
R	163		RS1/10S181J
R	164		RS1/10S223J
R	165		RS1/10S102J
R	166		RS1/16S102J
R	167		RS1/10S223J
R	168		RS1/16S181J
R	169		RS1/16S183J
R	170		RS1/10S222J
R	171		RS1/16S102J
R	172		RS1/16S102J
R	173		RS1/10S472J
R	174		RS1/10S223J
R	175		RS1/16S473J
R	176		RS1/16S473J
R	177		RS1/10S0R0J
R	178		RS1/16S0R0J
R	179		RS1/16S0R0J
R	185		RS1/16S0R0J
R	186		RS1/16S0R0J
R	187		RS1/16S0R0J
R	188		RS1/16S101J
R	189		RS1/16S473J
R	190		RS1/16S473J
R	191		RS1/16S0R0J
R	192		RS1/16S103J
R	193		RS1/16S103J
R	194		RS1/16S473J
R	195		RS1/16S473J
R	200		RS1/10S750J
R	201		RS1/10S102J
R	202		RS1/10S102J
R	203		RS1/10S473J
R	204		RS1/4S101J
R	205		RS1/16S104J
R	206		RS1/16S104J
R	207		RS1/16S102J
R	208		RS1/16S104J
R	209		RS1/16S104J
R	210		RS1/16S102J
R	211		RN1/16SE1002D
R	212		RN1/16SE1002D
R	213		RN1/16SE1002D
R	214		RN1/16SE1002D
R	215		RN1/16SE3001D
R	216		RN1/16SE3001D
R	217		RN1/16SE3001D
R	218		RN1/16SE3001D
R	219		RS1/10S103J
R	220		RS1/10S103J
R	230		RS1/16S0R0J
R	231		RS1/16S223J
R	232		RS1/16S223J
R	233		RS1/16S223J
R	234		RS1/16S222J
R	235		RS1/16S0R0J
R	236		RS1/16S104J
R	237		RS1/16S223J
R	238		RS1/16S561J
R	239		RS1/16S223J

=====Circuit Symbol & No.===Part Name			Part No.
R	241		RS1/16S473J
R	242		RS1/16S101J
R	243		RS1/16S101J
R	244		RS1/16S473J
R	245		RS1/16S104J
R	246		RS1/16S104J
R	247		RS1/16S222J
R	248		RS1/16S222J
R	249		RS1/16S473J
R	250		RS1/16S473J
R	259		RS1/16S750J
R	260		RS1/16S0R0J
R	261		RS1/10S471J
R	262		RS1/10S0R0J
R	264		RS1/10S101J
R	265		RS1/16S473J
R	266		RS1/10S0R0J
R	267		RS1/10S471J
R	268		RS1/10S471J
R	269		RS1/16S0R0J
R	270		RS1/16S471J
R	271		RS1/10S103J
R	272		RS1/10S102J
R	273		RN1/10SE1002D
R	274		RS1/10S471J
R	275		RS1/10S471J
R	276		RS1/10S0R0J
R	277		RS1/10S0R0J
R	278		RN1/10SE1002D
R	279		RS1/10S681J
R	281		RS1/10S102J
R	282		RS1/10S222J
R	283		RS1/10S123J
R	284		RS1/10S222J
R	285		RN1/10SE1002D
R	286		RS1/10S101J
R	287		RS1/10S101J
R	288		RS1/10S222J
R	289		RS1/10S101J
R	290		RS1/10S101J
R	291		RS1/10S103J
R	292		RS1/10S103J
R	293		RS1/10S331J
R	294		RS1/10S102J
R	295		RS1/10S331J
R	296		RS1/10S102J
R	297		RS1/10S331J
R	298		RS1/10S102J
R	299		RS1/16S471J
R	300		RS1/16S471J
R	301		RS1/16S471J
R	302		RS1/16S471J
R	303		RS1/16S471J
R	304		RS1/16S471J
R	305		RS1/10S0R0J
R	306		RS1/10S0R0J
R	307		RS1/10S0R0J
R	309		RS1/10S0R0J
R	310		RS1/10S0R0J
R	311		RS1/10S0R0J
R	350		RS1/10S104J
R	351		RS1/10S750J
R	352		RS1/10S750J
R	353		RS1/10S750J
R	354		RS1/10S750J

=====Circuit Symbol & No.===Part Name			Part No.
R	355		RS1/16S0R0J
R	360		RS1/16S0R0J
R	364		RS1/16S0R0J
R	365		RS1/16S0R0J
R	366		RS1/16S0R0J
R	368		RS1/10S0R0J
R	370		RS1/10S0R0J
R	371		RS1/16S0R0J
R	400		RS1/10S0R0J
R	401		RS1/10S473J
R	402		RS1/16S103J
R	403		RS1/10S473J
R	404		RS1/10S681J
R	405		RS1/10S681J
R	406		RS1/10S272J
R	407		RS1/10S272J
R	408		RS1/10S102J
R	410		RS1/16S393J
R	411		RS1/10S162J
R	412		RS1/10S162J
R	414		RS1/16S0R0J
R	415		RS1/16S0R0J
R	417		RS1/16S681J
R	418		RS1/10S0R0J
R	419		RS1/16S681J
R	420		RS1/16S681J
R	421		RS1/16S681J
R	424		RS1/16S473J
R	425		RS1/16S473J
R	426		RS1/10S473J
R	427		RS1/16S472J
R	429		RS1/16S473J
R	430		RS1/16S0R0J
R	431		RS1/16S0R0J
R	445		RS1/16S0R0J
R	446		RS1/16S0R0J
R	480		RS1/8S151J
R	491		RS1/16S0R0J
R	492		RS1/10S0R0J
R	500		RS1/16S102J
R	501		RS1/16S0R0J
R	502		RS1/16S225J
R	503		RS1/16S102J
R	504		RS1/16S681J
R	507		RS1/16S0R0J
R	508		RS1/16S473J
R	509		RS1/10S0R0J
R	510		RS1/16S0R0J
R	511		RS1/16S102J
R	512		RS1/16S0R0J
R	513		RS1/16S0R0J
R	515		RS1/10S0R0J
R	516		RS1/10S0R0J
R	601		RS1/16S0R0J
R	602		RS1/16S102J
R	603		RS1/16S102J
R	604		RS1/16S102J
R	605		RS1/16S222J
R	606		RS1/16S222J
R	607		RS1/16S473J
R	609		RS1/16S473J
R	610		RS1/16S473J
R	613		RAB4C471J
R	614		RAB4C221J
R	616		RS1/16S473J

=====Circuit Symbol & No.===Part Name			Part No.
R	617		RS1/16S102J
R	618		RS1/16S221J
R	619		RS1/16S473J
R	620		RS1/10S102J
R	621		RS1/16S101J
R	622		RS1/16S103J
R	623		RS1/16S101J
R	624		RS1/16S103J
R	625		RS1/16S473J
R	626		RS1/16S473J
R	627		RS1/16S102J
R	628		RS1/16S473J
R	629		RS1/16S471J
R	630		RS1/16S102J
R	631		RS1/16S473J
R	632		RS1/16S473J
R	633		RS1/16S681J
R	634		RS1/16S0R0J
R	635		RS1/16S0R0J
R	636		RS1/16S0R0J
R	637		RS1/16S0R0J
R	638		RS1/16S473J
R	639		RS1/16S473J
R	640		RS1/16S473J
R	641		RS1/16S473J
R	642		RS1/10S473J
R	643		RS1/10S223J
R	644		RS1/16S223J
R	645		RS1/16S102J
R	646		RS1/16S102J
R	647		RS1/16S473J
R	648		RS1/16S473J
R	649		RS1/16S473J
R	650		RS1/10S0R0J
R	651		RS1/10S471J
R	652		RS1/10S822J
R	660		RS1/16S221J
R	661		RAB4C221J
R	662		RS1/10S0R0J
R	663		RS1/16S102J
R	664		RS1/16S0R0J
R	665		RS1/16S0R0J
R	682		RS1/16S104J
R	683		RS1/16S103J
R	684		RS1/16S473J
R	685		RS1/16S471J
R	686		RS1/10S104J
R	687		RS1/10S102J
R	689		RS1/16S473J
R	690		RS1/16S102J
R	691		RS1/16S102J
R	692		RS1/16S102J
R	698		RS1/16S0R0J
R	730		RS1/16S472J
R	731		RS1/16S103J
R	732		RS1/4S681J
R	733		RS1/16S473J
R	734		RS1/16S103J
R	735		RS1/16S103J
R	736		RS1/10S473J
R	737		RS1/16S103J
R	738		RS1/10S103J
R	739		RS1/10S103J
R	740		RS1/10S333J
R	741		RS1/16S331J

=====Circuit Symbol & No.===Part Name			Part No.
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R	742		RS1/16S224J
R	743		RS1/16S473J
R	745		RS1/16S0R0J
R	800		RS1/16S102J
R	801		RS1/16S102J
R	802		RS1/10S473J
R	803		RS1/10S473J
R	804		RS1/10S472J
R	805		RS1/10S473J
R	806		RS1/10S102J
R	807		RS1/10S102J
R	808		RS1/10S472J
R	810		RS1/10S472J
R	811		RD1/4PU271J
R	812		RD1/4PU271J
R	813		RS1/10S472J
R	814		RS1/10S271J
R	815		RS1/10S822J
R	816		RD1/4PU431J
R	818		RS1/10S822J
R	819		RD1/4PU122J
R	820		RS1/10S331J
R	821		RS1/10S102J
R	822		RS1/10S472J
R	823		RS1/10S273J
R	824		RS1/10S273J
R	825		RS1/10S102J
R	826		RS1/10S472J
R	827		RS1/10S221J
R	828		RS1/10S752J
R	829		RS1/10S472J
R	830		RS1/10S561J
R	831		RS1/16S103J
R	832		RS1/16S473J
R	833		RS1/10S473J
R	834		RS1/8S153J
R	835		RS1/10S473J
R	836		RS1/10S392J
R	837		RS1/10S223J
R	838		RS1/8S101J
R	839		RS1/16S472J
R	840		RS1/10S102J
R	841		RS1/10S473J
R	842		RS1/16S472J
R	843		RS1/10S472J
R	845		RS1/10S103J
R	846		RS1/8S103J
R	847		RS1/10S103J
R	848		RS1/10S102J
R	849		RS1/10S473J
R	850		RS1/10S473J
R	851		RS1/10S472J
R	852		RS1/10S103J
R	853		RS1/10S472J
R	854		RS1/10S472J
R	855		RS1/8S153J
R	860		RD1/4PU221J
R	870		RS1/16S102J
R	900		RS1/16S103J
R	901		RS1/16S103J
R	902		RS1/10S103J
R	903		RS1/16S0R0J
R	904		RS1/10S331J
R	905		RS1/10S103J
R	906		RS1/16S0R0J

=====Circuit Symbol & No.===Part Name			Part No.
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R	907		RS1/16S331J
R	919		RS1/16S102J
R	920		RS1/10S471J
R	921		RS1/10S471J
R	922		RS1/10S471J
R	923		RS1/10S471J
R	924		RS1/10S471J
R	925		RS1/10S471J
R	926		RS1/10S471J
R	927		RS1/10S471J
R	928		RS1/16S472J
R	929		RS1/10S471J
R	930		RS1/10S471J
R	931		RS1/10S101J
R	932		RS1/10S101J
R	934		RS1/16S472J
R	935		RS1/10S471J
R	936		RS1/10S471J
R	938		RS1/10S473J
R	939		RS1/10S473J
R	942		RS1/10S473J
R	943		RS1/10S473J
R	944		RS1/10S473J
R	945		RS1/10S473J
R	947		RS1/16S101J
R	948		RS1/10S821J
R	949		RS1/10S103J
R	950		RS1/10S473J
R	951		RS1/10S103J
R	952		RS1/10S104J
R	953		RS1/10S104J
R	954		RS1/10S103J
R	955		RS1/16S104J
R	956		RS1/10S103J
R	957		RS1/16S103J
R	958		RS1/16S103J
R	959		RS1/16S103J
R	960		RS1/16S103J
R	961		RS1/16S103J
R	962		RS1/16S103J
R	963		RS1/10S821J
R	964		RS1/10S821J
R	965		RS1/10S821J
R	966		RS1/10S821J
R	967		RS1/10S821J
R	968		RS1/10S821J
R	969		RS1/10S223J
R	970		RS1/10S223J
R	971		RS1/10S223J
R	972		RS1/10S223J
R	973		RS1/10S223J
R	974		RS1/10S223J
R	975		RS1/16S822J
R	976		RS1/16S0R0J
R	977		RS1/16S0R0J
R	978		RS1/16S0R0J

CAPACITORS

C	60		CEJA100M16
C	61		CEJA100M16
C	62		CEJA100M16
C	63		CKSQYB104K50
C	64		CKSQYB104K50
C	65		CCSRCH270J50
C	66		CCSRCH270J50
C	100		CKSRYB471K50
C	101		CKSRYB471K50
C	102		CCSRCH101J50

=====Circuit Symbol & No.===		Part Name	Part No.
C	103		CCSRCH101J50
C	104		CEJA220M16
C	105		CEJA101M16
C	106		CEJA4R7M35
C	107		CEJA4R7M35
C	108		CEJA4R7M35
C	109		CEJA1R0M50
C	110		CEJA4R7M35
C	111		CKSRYB102K50
C	112		CEJA330M16
C	113		CEJA100M16
C	115		CKSYB225K16
C	117		CKSYB225K16
C	118		CKSRYB102K50
C	119		CKSQYB225K10
C	120		CKSQYB225K10
C	121		CKSRYB102K50
C	122		CCSRCH101J50
C	123		CCSRCH101J50
C	150		CEJA100M16
C	151		CEJA100M16
C	152		CKSQYB103K50
C	153	470μF/6.3V	CCH1182
C	154		CEJA100M16
C	155		CEJA100M16
C	156		CKSYB475K10
C	160		CKSQYB104K50
C	161		CKSQYB105K16
C	162		CKSQYB105K16
C	163		CEJA100M16
C	164		CEJA100M16
C	165		CKSQYB105K16
C	166		CKSQYB105K16
C	167		CKSQYB104K50
C	168		CEJANP100M10
C	169		CEJANP100M10
C	170		CEJANP220M10
C	171		CEJANP220M10
C	185		CEJA100M16
C	186		CEJA100M16
C	187		CEJA1R0M50
C	200		CKSQYB104K50
C	201		CKSQYB104K50
C	202		CKSQYB104K50
C	203		CEJANP100M10
C	204		CEJANP100M10
C	205		CEJANP100M10
C	206		CEJANP100M10
C	207		CCSQCH101J50
C	208		CCSQCH101J50
C	209		CEJA4R7M35
C	210		CCSQCH101J50
C	211		CCSQCH101J50
C	212		CEJA4R7M35
C	213		CKSQYB471K50
C	214		CEJA101M10
C	230		CKSQYB104K50
C	231		CKSRYB153K25
C	232		CEJAR10M50
C	233		CEJA100M16
C	234		CCSRCH101J50
C	235		CEJA101M16
C	236		CKSQYB104K50
C	237		CEJANPR10M50
C	238		CKSRYB473K25

=====Circuit Symbol & No.===		Part Name	Part No.
C	239		CKSRYB222K50
C	240		CKSRYB473K25
C	241		CEJANP100M16
C	242		CEJANP100M16
C	243		CEJA100M16
C	244		CKSRYB104K16
C	259		CKSRYB221K50
C	261		CEJAR10M50
C	262		CKSQYB103K50
C	263		CCSQCH180J50
C	264		CKSQYB474K16
C	265		CEJA1R0M50
C	266		CKSQYB105K16
C	267		CEJA1R0M50
C	268		CEJA100M16
C	269		CEJA4R7M35
C	270		CKSQYB103K50
C	271		CCSQCH470J50
C	272		CEJA1R0M50
C	273		CKSQYB104K50
C	274		CEJA100M16
C	275		CKSQYB103K50
C	276		CCSQCH100J50
C	277		CKSQYB104K50
C	278		CKSQYB103K50
C	279		CKSQYB103K50
C	280		CKSQYB103K50
C	281		CEJA470M10
C	282		CKSQYB104K50
C	283		CEJA100M16
C	285		CKSQYB103K50
C	286		CKSQYB105K16
C	287		CKSQYB103K50
C	288		CKSQYB103K50
C	289		CKSQYB471K50
C	290		CEJA1R0M50
C	291		CKSQYB103K50
C	292		CKSQYB472K50
C	293		CCSQCH100J50
C	294		CKSQYB103K50
C	295		CKSQYB103K50
C	300		CEJA470M10
C	301		CKSRYB103K50
C	302		CEJA100M16
C	303		CKSQYB221K50
C	304		CEJA100M16
C	305		CKSQYB221K50
C	306		CKSQYB105K16
C	307		CKSQYB105K16
C	308		CKSQYB105K16
C	309		CKSQYB221K50
C	310		CKSQYB105K16
C	311		CKSQYB105K16
C	312		CKSQYB105K16
C	316		CEJA100M16
C	317		CKSQYB105K16
C	318		CEJA100M16
C	319		CEJA100M16
C	321		CKSQYB103K50
C	322		CKSQYB103K50
C	323		CKSQYB105K16
C	325		CKSQYB103K50
C	328		CKSQYB103K50
C	350		CEJA1R0M50
C	351		CKSQYB103K50

=====Circuit Symbol & No.===Part Name			Part No.
C	352		CEJA470M6R3
C	353		CKSQYB103K50
C	354		CEJA220M10
C	355		CEJA221M6R3
C	356		CKSQYB103K50
C	357		CEJA470M6R3
C	359	470μF/6.3V	CCH1182
C	360	470μF/6.3V	CCH1182
C	361	470μF/6.3V	CCH1182
C	400		CKSQYB103K50
C	401		CKSQYB183K50
C	402		CKSQYB183K50
C	403		CKSQYB102K50
C	405	330μF/10V	CCH1181
C	406		CKSQYB472K50
C	411		CKSQYB473K50
C	413		CEJA101M16
C	414		CKSQYB223K50
C	418		CKSQYB105K16
C	419		CKSQYB105K16
C	424		CCSRCH101J50
C	480		CCSRCH101J50
C	481		CKSRYB102K50
C	482		CEJA100M16
C	501		CEJA220M10
C	503		CKSRYB104K16
C	505		CCSRCH471J50
C	506		CCSRCH471J50
C	507		CKSRYB104K16
C	509		CCSQCH270J50
C	510		CCSQCH270J50
C	513		CCSRCH101J50
C	514		CCSRCH101J50
C	600		CKSRYB103K50
C	601		CKSRYB102K50
C	603		CKSRYB102K50
C	604		CCSRCH102J50
C	606		CKSQYB104K50
C	607		CKSRYB104K16
C	608		CCSRCH270J50
C	609		CCSRCH270J50
C	610		CCSRCH101J50
C	611		CCSRCH101J50
C	650		CEJA2R2M50
C	660		CCSRCH220J50
C	661		CCSRCH220J50
C	662		CCSRCH220J50
C	663		CCSRCH220J50
C	664		CCSRCH220J50
C	665	0.1F/5.5V	CCL1023
C	666		CKSQYB104K50
C	667		CEJA470M16
C	668		CKSQYB105K16
C	669		CCSRCH220J50
C	670		CCSRCH220J50
C	671		CCSRCH220J50
C	672		CCSRCH220J50
C	673		CCSRCH220J50
C	674		CCSRCH220J50
C	682		CEJANP1R0M50
C	685		CEJANP1R0M50
C	686		CKSQYB104K50
C	687		CKSQYB104K50
C	688		CKSQYB103K50
C	689		CKSQYB105K16

=====Circuit Symbol & No.===Part Name			Part No.
C	730		CKSRYB472K50
C	800		CKSYB225K16
C	801		CKSYB225K16
C	802	330μF/10V	CCH1181
C	803		CKSRYB103K50
C	804	330μF/10V	CCH1181
C	805		CKSRYB103K50
C	806		CKSQYB104K50
C	807		CEJA101M16
C	808		CKSQYB104K50
C	809	330μF/10V	CCH1181
C	810		CKSYB225K16
C	811	1000μF/16V	CCH1003
C	812		CEJA101M10
C	813	330μF/10V	CCH1181
C	814		CKSQYB103K50
C	815		CKSQYB103K50
C	816		CEJA100M16
C	817		CEJA220M10
C	818		CEJA101M16
C	819		CKSQYB103K50
C	820		CEJA470M10
C	821		CEJA101M16
C	822		CKSQYB472K50
C	823		CKSQYB103K50
C	824		CKSQYB103K50
C	825		CEJA101M16
C	826	2200μF/16V	CCH1186
C	827	1000μF/16V	CCH1003
C	829		CEJA101M16
C	830		CKSQYB103K50
C	831		CKSQYB472K50
C	833		CKSQYB472K50
C	834		CCSRCH101J50
C	860		CKSQYB103K50
C	861		CEJA100M16
C	862		CKSQYB103K50
C	902		CEJA100M16
C	903		CEJA100M16
C	904		CKSYB475K16
C	905		CKSYB475K16
C	906	10.0μF/16V	CCG1143
C	907	10.0μF/16V	CCG1143
C	908		CKSYB104K50
C	909		CEJA330M16
C	910		CEAT682M16
C	911		CEJA330M16
C	912		CKSQYB473K50
C	913		CKSYB104K50
C	914	3300μF/16V	CCH1344
C	916		CEJA4R7M35
C	917		CEJA4R7M35
C	919		CKSYB105K16
C	920		CEJA4R7M35
C	921		CEJA4R7M35
C	922		CEJA4R7M35
C	923		CEJA4R7M35
C	925		CKSYB225K16
C	926		CKSYB225K16
C	927		CKSYB225K16
C	928		CKSYB225K16
C	929		CKSYB225K16
C	930		CKSYB225K16
C	931		CKSYB225K16
C	932		CKSYB225K16

=====Circuit Symbol & No.===Part Name Part No.

C	933		CEJA4R7M35
C	934		CEJA4R7M35
C	935		CKSQYB224K16
C	936		CCSRCH560J50
C	937		CKSYB225K16
C	938		CKSYB225K16
C	939		CKSQYB224K16
C	940		CKSYB225K16
C	941		CKSYB225K16
C	942		CCSRCH560J50
C	943		CEJA100M16
C	944		CEJA100M16
C	945		CEJA100M16
C	946		CEJA100M16
C	947		CEJA100M16
C	948		CEJA100M16
C	949		CEJA100M16
C	950		CKSQYB102K50
C	951		CKSQYB102K50
C	952		CKSQYB102K50
C	953		CKSQYB102K50
C	954		CKSQYB102K50
C	955		CKSQYB102K50
C	978		CKSRYB103K50
C	979		CKSRYB104K16

A Unit Number : CWM7151 (AVM-P9000R/EW)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC	60	IC	NJM4558MD
IC	100	IC	BA3121F
IC	101	IC	BA3129F
IC	150	IC	NJM2246M
IC	160	IC	TA2050S
IC	161	IC	CA0008AM
IC	185	IC	NJM4558MD
IC	200	IC	NJM4558MD
IC	230	IC	NJM4558MD
IC	231	IC	TDA7052BT
IC	232	IC	NJM4558MD
IC	260	IC	CXA2060BS
IC	261	IC	TC74VHC123AFT
IC	263	IC	NJM2235V
IC	264	IC	TC7SH04FU
IC	265	IC	NJM2246M
IC	266	IC	NJM2246M
IC	267	IC	NJM2246M
IC	268	IC	TC7SH04FU
IC	350	IC	NJM2267M
IC	351	IC	BA7623F
IC	480	IC	S-81250SGUP
IC	500	IC	PM4009A
IC	600	IC	PDH026A
IC	601	IC	PE5152A
IC	650	IC	S-80734ANDYI
IC	681	IC	BA3834F
IC	800	IC	BA05ST-V5
IC	801	IC	BA05ST-V5
IC	802	IC	BA05ST-V5
IC	803	IC	BA09SFP
IC	900	IC	PAL005A
IC	901	IC	PAL005A
IC	920	IC	NJU7032M
IC	921	IC	NJM2068MD

=====Circuit Symbol & No.===Part Name Part No.

IC	922	IC	NJU7032M
Q	1	Transistor	2SC2412K
Q	2	Transistor	DTA114EK
Q	100	Transistor	DTC124EK
Q	101	Transistor	FMG12
Q	102	Transistor	DTA114EK
Q	150	Transistor	2SA1037K
Q	151	Transistor	FMG12
Q	152	Transistor	DTA114EK
Q	160	Transistor	2SA1037K
Q	161	Transistor	DTC124EK
Q	200	Transistor	2SC2412K
Q	230	Transistor	DTC124EK
Q	261	Transistor	2SA1037K
Q	262	Transistor	2SC2412K
Q	263	Transistor	2SC2412K
Q	264	Transistor	2SC2412K
Q	265	Transistor	2SC2412K
Q	266	Transistor	2SA1037K
Q	267	Transistor	2SA1037K
Q	268	Transistor	2SC2412K
Q	269	Transistor	2SA1037K
Q	270	Transistor	2SA1037K
Q	271	Transistor	2SA1037K
Q	350	Transistor	DTA143EK
Q	351	Transistor	DTC323TU
Q	352	Transistor	FMG12
Q	353	Transistor	DTA114EK
Q	400	Transistor	2SC2412K
Q	402	Transistor	IMH3A
Q	403	Transistor	DTA114EK
Q	404	Transistor	2SC2412K
Q	405	Transistor	2SD1757K
Q	406	Transistor	2SD1757K
Q	407	Transistor	2SC2412K
Q	500	Transistor	DTA124EK
Q	600	Transistor	DTA144EU
Q	601	Transistor	2SC2412K
Q	680	Transistor	2SC2412K
Q	681	Transistor	DTC124TK
Q	730	Transistor	2SC2412K
Q	731	Transistor	DTC144EK
Q	732	Transistor	2SC2412K
Q	733	Transistor	2SC2412K
Q	734	Transistor	DTC124EK
Q	735	Transistor	2SA1037K
Q	736	Transistor	IMD2A
Q	737	Transistor	DTA124EU
Q	738	Transistor	2SC2412K
Q	800	Transistor	DTA124EK
Q	801	Transistor	2SA1797
Q	802	Transistor	DTC114EK
Q	803	Transistor	2SD1857
Q	804	Transistor	2SD2396
Q	805	Transistor	2SB1184F5
Q	806	Transistor	2SC2412K
Q	807	Transistor	2SA1797
Q	808	Transistor	2SA1797
Q	809	Transistor	DTC144EK
Q	810	Transistor	2SC2412K
Q	811	Transistor	2SA1037K
Q	812	Transistor	2SD1760F5
Q	813	Transistor	2SD2396
Q	814	Transistor	2SC2412K
Q	815	Transistor	DTA124EK

=====Circuit Symbol & No.===Part Name			Part No.
---	------	--	-------------------------
Q	816	Transistor	2SA1037K
Q	817	Transistor	IMD2A
Q	818	Transistor	DTC144EK
Q	819	Transistor	IMX1
Q	820	Transistor	2SA1037K
Q	821	Transistor	DTC124EK
Q	822	Transistor	2SA1037K
Q	860	Transistor	2SD1859
Q	861	Transistor	IMD3A
Q	900	Transistor	DTC114TK
Q	920	Transistor	IMD2A
Q	921	Transistor	DTA124EK
Q	922	Transistor	FMG12
Q	923	Transistor	IMD2A
Q	924	Transistor	FMG12
Q	925	Transistor	FMG12
Q	926	Transistor	FMG12
Q	927	Transistor	IMH3A
Q	928	Transistor	FMG12
Q	929	Transistor	FMG12
Q	932	Transistor	DTC323TK
Q	933	Transistor	DTC323TK
Q	934	Transistor	FMG13
Q	935	Transistor	FMG13
Q	936	Transistor	FMG13
D	1	Diode	UDZ12(B)
D	2	Diode	UDZ12(B)
D	3	Diode	UDZ12(B)
D	4	Diode	UDZ12(B)
D	6	Diode	UDZ12(B)
D	7	Diode	UDZ12(B)
D	9	Diode	UDZ12(B)
D	10	Diode	UDZ12(B)
D	11	Diode	UDZ12(B)
D	12	Diode	UDZ12(B)
D	13	Diode	UDZ12(B)
D	100	Diode	UDZ12(B)
D	101	Diode	UDZ12(B)
D	102	Diode	MA110
D	103	Diode	UDZ12(B)
D	185	Diode	UDZ12(B)
D	200	Diode	UDZ12(B)
D	201	Diode	MA110
D	260	Diode	MA110
D	261	Diode	MA110
D	262	Diode	MA8039(H)
D	263	Diode	MA152WK
D	350	Diode	UDZ12(B)
D	351	Diode	UDZ12(B)
D	352	Diode	UDZ12(B)
D	353	Diode	UDZ12(B)
D	354	Diode	UDZ12(B)
D	355	Diode	UDZ12(B)
D	357	Diode	UDZ12(B)
D	358	Diode	UDZ12(B)
D	359	Diode	UDZ12(B)
D	360	Diode	UDZ12(B)
D	361	Diode	UDZ12(B)
D	480	Diode	HZS16L(1)
D	650	Diode	MA152WK
D	651	Diode	MA110
D	660	Diode	1SS133
D	661	Diode	UDZ12(B)
D	730	Diode	HZS9L(A2)
D	731	Diode	MA111

=====Circuit Symbol & No.===Part Name			Part No.
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D	732	Diode	HZS9L(A2)
D	733	Diode	MA152WK
D	734	Diode	MA152WK
D	800	Diode	ERA15-02VH
D	801	Diode	HZS6L(B1)
D	802	Diode	HZS9L(B3)
D	803	Diode	1SS133
D	804	Diode	MA152WK
D	805	Diode	HZS6L(C3)
D	806	Diode	HZS9L(B3)
D	807	Diode	MA152WK
D	808	Diode	ERA15-02VH
D	809	Diode	MA152WK
D	810	Diode	UDZ7R5(B)
D	811	Diode	HZS7L(A1)
D	814	Diode	ERA15-02VH
D	815	Diode	MA152WK
D	816	Diode	ERA15-02VH
D	817	Diode	ERA15-02VH
D	818	Diode	ERA15-02VH
D	819	Diode	ERA15-02VH
D	820	Diode	ERA15-02VH
D	821	Diode	ERA15-02VH
D	823	Diode	1SR154-400
D	824	Diode	1SR154-400
D	825	Diode	1SR154-400
D	826	Diode	1SR154-400
D	860	Diode	UDZ12(B)
D	921	Diode	MA152WK
L	1	Inductor	CTF1305
L	2	Inductor	CTF1305
L	3	Inductor	CTF1305
L	4	Inductor	CTF1305
L	100	Inductor	LCTB2R2K2125
L	101	Inductor	LCTB2R2K2125
L	150	Inductor	LCTB4R7K2125
L	151	Inductor	LCTA220J3225
L	160	Inductor	LCTB3R3K2125
L	200	Inductor	LCTA1R5J3225
L	260	Chip-Inductor	LCTA2R2J3225
L	261	Chip-Inductor	LCTA2R2J3225
L	263	Inductor	CTF1305
L	264	Inductor	CTF1305
L	265	Inductor	LCTB2R2K2125
L	266	Inductor	CTF1305
L	267	Inductor	LCTB2R2K2125
L	268	Inductor	LCTB2R2K2125
L	269	Inductor	CTF1306
L	270	Inductor	LCTB4R7K2125
L	271	Inductor	LCTB4R7K2125
L	272	Inductor	LCTB4R7K2125
L	274	Inductor	LCTB100K2125
L	275	Inductor	CTF1305
L	276	Inductor	CTF1399
L	350	Inductor	LCTA680J3225
L	351	Inductor	LCTA680J3225
L	353	Inductor	CTF1305
L	355	Inductor	CTF1305
L	356	Inductor	CTF1305
L	357	Inductor	CTF1305
L	358	Inductor	CTF1399
L	359	Inductor	CTF1399
L	400	Inductor	LCTB4R7K2125
L	408	Inductor	CTF1399
L	409	Inductor	CTF1306

=====Circuit Symbol & No.		===Part Name	Part No.
L	410	Inductor	CTF1306
L	411	Inductor	CTF1306
L	412	Inductor	CTF1306
L	413	Chip-Inductor	LCTA2R2J3225
L	416	Inductor	CTF1306
L	418	Ferri-Inductor	LAU2R2K
L	419	Inductor	CTF1399
L	500	Inductor	CTF1409
L	501	Inductor	CTF1409
L	507	Inductor	CTF1420
L	508	Inductor	CTF1409
L	509	Inductor	CTF1306
L	510	Inductor	CTF1306
L	512	Inductor	CTF1409
L	513	Inductor	CTF1409
L	600	Inductor	CTF1306
L	601	Inductor	CTF1420
L	602	Inductor	CTF1470
L	603	Inductor	CTF1306
L	604	Inductor	CTF1306
L	605	Inductor	CTF1399
L	606	Inductor	CTF1399
L	607	Inductor	CTF1306
L	608	Inductor	CTF1410
L	650	Inductor	CTF1399
L	660	Inductor-Array	CTF1421
L	661	Inductor-Array	CTF1421
L	662	Inductor	CTF1306
L	663	Inductor	CTF1306
L	664	Inductor	CTF1306
L	665	Inductor	CTF1306
L	666	Inductor	CTF1409
L	668	Inductor	CTF1306
L	669	Inductor	CTF1306
L	670	Inductor	CTF1306
L	672	Inductor	CTF1306
L	673	Inductor	CTF1409
L	674	Inductor	CTF1409
L	675	Inductor	CTF1409
L	676	Inductor	CTF1409
L	677	Inductor	CTF1306
L	680	Inductor	CTF1399
L	681	Inductor	CTF1399
L	682	Inductor-Array	CTF1421
L	683	Inductor	CTF1306
L	800	Inductor	CTF1420
L	801	Inductor	CTF1420
L	802	Choke Coil 100μH	CTH1157
L	803	Choke Coil 390mH	CTH1209
L	804	Ferri-Inductor	LAU2R2K
L	805	Chip-Inductor	LCTA2R2J3225
L	806	Choke Coil 600mH	CTH1171
L	807	Choke Coil 600mH	CTH1171
L	808	Chip-Inductor	LCTA2R2J3225
L	809	Inductor	CTF1399
L	810	Inductor	CTF1489
L	980	Inductor	CTF1409
X	260	Crystal Resonator 4.433619MHz	CSS1460
X	261	Crystal Resonator 3.579545MHz	CSS1465
X	500	Crystal Resonator 3.648MHz	CSS1447
X	600	Radiator 12.5829MHz	CSS1495
S	650	Switch(RESET)	CSG1046
VR	260	Semi-fixed 100kΩ(B)	CCP1133
FU	1	Micro-Fuse 2A	CEK1190
FU	2	Micro-Fuse 2A	CEK1190
FU	3	Micro-Fuse 2A	CEK1190
FU	100	Micro-Fuse 2A	CEK1190
FU	150	Micro-Fuse 2A	CEK1190
FU	180	Micro-Fuse 2A	CEK1190
FU	200	Micro-Fuse 2A	CEK1190
FU	350	Micro-Fuse 2A	CEK1190
FU	351	Micro-Fuse 2A	CEK1190
FU	352	Micro-Fuse 2A	CEK1190
FU	800	Micro-Fuse 800mA	CEK1206
FU	801	Micro-Fuse 2A	CEK1190
FU	860	Micro-Fuse 400mA	CEK1184
		GDC Unit	CWM7146
		DSP Unit	CWM7147
		FM/AM Tuner Unit	CWE1500
AR	400	Surge Protector	DSPS-201M-S00B

RESISTORS

R	1		RS1/16S750J
R	2		RS1/16S750J
R	3		RS1/16S750J
R	4		RS1/16S0R0J
R	5		RS1/16S750J
R	7		RS1/16S0R0J
R	9		RS1/16S0R0J
R	10		RS1/16S0R0J
R	11		RS1/16S0R0J
R	15		RS1/16S0R0J
R	16		RS1/10S0R0J
R	17		RS1/10S332J
R	18		RS1/10S333J
R	19		RS1/10S104J
R	20		RS1/10S473J
R	60		RS1/10S101J
R	61		RS1/10S473J
R	62		RS1/10S473J
R	63		RS1/10S563J
R	64		RS1/10S563J
R	65		RS1/10S473J
R	66		RS1/10S473J
R	100		RS1/10S0R0J
R	101		RS1/10S0R0J
R	102		RS1/16S750J
R	103		RS1/10S123J
R	104		RS1/10S123J
R	105		RS1/16S123J
R	106		RS1/16S123J
R	107		RS1/10S102J
R	108		RS1/10S102J
R	109		RS1/10S220J
R	110		RS1/16S0R0J
R	111		RS1/16S0R0J
R	112		RS1/16S102J
R	113		RS1/16S102J
R	114		RS1/16S104J
R	115		RS1/16S104J
R	116		RS1/16S104J
R	117		RS1/16S104J
R	118		RS1/16S123J
R	119		RS1/16S133J
R	120		RS1/16S473J
R	121		RS1/16S153J
R	122		RS1/16S153J
R	123		RS1/16S473J
R	124		RS1/16S362J
R	125		RS1/16S223J
R	126		RS1/16S223J
R	127		RS1/16S362J

=====Circuit Symbol & No.		===Part Name	Part No.
R	128		RS1/10S220J
R	129		RS1/10S821J
R	130		RS1/10S821J
R	131		RS1/16S104J
R	132		RS1/16S473J
R	133		RS1/16S0R0J
R	135		RS1/16S0R0J
R	136		RS1/16S223J
R	137		RS1/16S0R0J
R	140		RS1/16S223J
R	150		RS1/10S471J
R	151		RS1/10S471J
R	152		RS1/10S681J
R	153		RS1/10S0R0J
R	154		RS1/10S101J
R	155		RS1/10S0R0J
R	156		RS1/16S270J
R	157		RS1/16S330J
R	160		RS1/10S101J
R	161		RS1/10S620J
R	162		RS1/10S101J
R	163		RS1/10S181J
R	164		RS1/10S223J
R	165		RS1/10S102J
R	166		RS1/16S102J
R	167		RS1/10S223J
R	168		RS1/16S181J
R	169		RS1/16S183J
R	170		RS1/10S222J
R	171		RS1/16S102J
R	172		RS1/16S102J
R	173		RS1/10S472J
R	174		RS1/10S223J
R	175		RS1/16S473J
R	176		RS1/16S473J
R	177		RS1/10S0R0J
R	178		RS1/16S0R0J
R	179		RS1/16S0R0J
R	185		RS1/16S0R0J
R	186		RS1/16S0R0J
R	187		RS1/16S0R0J
R	188		RS1/16S101J
R	189		RS1/16S473J
R	190		RS1/16S473J
R	191		RS1/16S0R0J
R	192		RS1/16S103J
R	193		RS1/16S103J
R	194		RS1/16S473J
R	195		RS1/16S473J
R	200		RS1/10S750J
R	201		RS1/10S102J
R	202		RS1/10S102J
R	203		RS1/10S473J
R	204		RS1/4S101J
R	205		RS1/16S104J
R	206		RS1/16S104J
R	207		RS1/16S102J
R	208		RS1/16S104J
R	209		RS1/16S104J
R	210		RS1/16S102J
R	211		RN1/16SE1002D
R	212		RN1/16SE1002D
R	213		RN1/16SE1002D
R	214		RN1/16SE1002D
R	215		RN1/16SE3001D

=====Circuit Symbol & No.		===Part Name	Part No.
R	216		RN1/16SE3001D
R	217		RN1/16SE3001D
R	218		RN1/16SE3001D
R	219		RS1/10S103J
R	220		RS1/10S103J
R	230		RS1/16S0R0J
R	231		RS1/16S223J
R	232		RS1/16S223J
R	233		RS1/16S223J
R	234		RS1/16S222J
R	235		RS1/16S0R0J
R	236		RS1/16S104J
R	237		RS1/16S223J
R	238		RS1/16S561J
R	239		RS1/16S223J
R	241		RS1/16S473J
R	242		RS1/16S101J
R	243		RS1/16S101J
R	244		RS1/16S473J
R	245		RS1/16S104J
R	246		RS1/16S104J
R	247		RS1/16S222J
R	248		RS1/16S222J
R	249		RS1/16S473J
R	250		RS1/16S473J
R	259		RS1/16S750J
R	260		RS1/16S0R0J
R	261		RS1/10S471J
R	262		RS1/10S0R0J
R	264		RS1/10S101J
R	265		RS1/16S473J
R	266		RS1/10S0R0J
R	267		RS1/10S471J
R	268		RS1/10S471J
R	269		RS1/16S0R0J
R	270		RS1/16S471J
R	271		RS1/10S103J
R	272		RS1/10S102J
R	273		RN1/10SE1002D
R	274		RS1/10S471J
R	275		RS1/10S471J
R	276		RS1/10S0R0J
R	277		RS1/10S0R0J
R	278		RN1/10SE1002D
R	279		RS1/10S681J
R	281		RS1/10S102J
R	282		RS1/10S222J
R	283		RS1/10S123J
R	284		RS1/10S222J
R	285		RN1/10SE1002D
R	286		RS1/10S101J
R	287		RS1/10S101J
R	288		RS1/10S222J
R	289		RS1/10S101J
R	290		RS1/10S101J
R	291		RS1/10S103J
R	292		RS1/10S103J
R	293		RS1/10S331J
R	294		RS1/10S102J
R	295		RS1/10S331J
R	296		RS1/10S102J
R	297		RS1/10S331J
R	298		RS1/10S102J
R	299		RS1/16S471J
R	300		RS1/16S471J

=====Circuit Symbol & No.===Part Name		Part No.
R	301	RS1/16S471J
R	302	RS1/16S471J
R	303	RS1/16S471J
R	304	RS1/16S471J
R	305	RS1/10S0R0J
R	306	RS1/10S0R0J
R	307	RS1/10S0R0J
R	309	RS1/10S0R0J
R	310	RS1/10S0R0J
R	311	RS1/10S0R0J
R	350	RS1/10S104J
R	351	RS1/10S750J
R	352	RS1/10S750J
R	353	RS1/10S750J
R	354	RS1/10S750J
R	355	RS1/16S0R0J
R	360	RS1/16S0R0J
R	364	RS1/16S0R0J
R	365	RS1/16S0R0J
R	366	RS1/16S0R0J
R	368	RS1/10S0R0J
R	370	RS1/10S0R0J
R	371	RS1/16S0R0J
R	400	RS1/10S0R0J
R	401	RS1/10S473J
R	402	RS1/16S103J
R	403	RS1/10S473J
R	404	RS1/10S681J
R	405	RS1/10S681J
R	406	RS1/10S162J
R	407	RS1/10S162J
R	408	RS1/10S102J
R	410	RS1/16S393J
R	411	RS1/10S272J
R	412	RS1/10S272J
R	413	RS1/10S473J
R	416	RS1/10S681J
R	417	RS1/16S681J
R	418	RS1/10S0R0J
R	419	RS1/16S681J
R	420	RS1/16S681J
R	421	RS1/16S681J
R	422	RS1/10S104J
R	423	RS1/10S104J
R	424	RS1/16S473J
R	425	RS1/16S473J
R	426	RS1/10S473J
R	427	RS1/16S472J
R	429	RS1/16S473J
R	430	RS1/16S0R0J
R	431	RS1/16S0R0J
R	432	RS1/16S681J
R	433	RS1/16S681J
R	434	RS1/10S222J
R	435	RS1/10S222J
R	436	RS1/10S224J
R	437	RS1/10S224J
R	438	RS1/10S223J
R	439	RS1/10S223J
R	440	RS1/10S224J
R	441	RS1/10S153J
R	442	RS1/10S474J
R	443	RS1/16S681J
R	445	RS1/16S0R0J
R	446	RS1/16S0R0J

=====Circuit Symbol & No.===Part Name		Part No.
R	480	RS1/8S151J
R	500	RS1/16S102J
R	501	RS1/16S0R0J
R	502	RS1/16S225J
R	503	RS1/16S102J
R	504	RS1/16S681J
R	505	RS1/16S0R0J
R	507	RS1/16S0R0J
R	508	RS1/16S473J
R	509	RS1/10S0R0J
R	510	RS1/16S0R0J
R	511	RS1/16S102J
R	512	RS1/16S0R0J
R	513	RS1/16S0R0J
R	514	RS1/16S0R0J
R	515	RS1/10S0R0J
R	516	RS1/10S0R0J
R	600	RS1/16S0R0J
R	601	RS1/16S0R0J
R	602	RS1/16S102J
R	603	RS1/16S102J
R	604	RS1/16S102J
R	605	RS1/16S222J
R	606	RS1/16S222J
R	607	RS1/16S473J
R	609	RS1/16S473J
R	610	RS1/16S473J
R	613	RAB4C471J
R	614	RAB4C221J
R	616	RS1/16S473J
R	617	RS1/16S102J
R	618	RS1/16S221J
R	619	RS1/16S473J
R	620	RS1/10S102J
R	621	RS1/16S101J
R	622	RS1/16S103J
R	623	RS1/16S101J
R	624	RS1/16S103J
R	625	RS1/16S473J
R	626	RS1/16S473J
R	627	RS1/16S102J
R	628	RS1/16S473J
R	629	RS1/16S471J
R	630	RS1/16S102J
R	631	RS1/16S473J
R	632	RS1/16S473J
R	633	RS1/16S681J
R	634	RS1/16S0R0J
R	635	RS1/16S0R0J
R	636	RS1/16S0R0J
R	637	RS1/16S0R0J
R	638	RS1/16S473J
R	639	RS1/16S473J
R	640	RS1/16S473J
R	641	RS1/16S473J
R	642	RS1/10S473J
R	643	RS1/10S223J
R	644	RS1/16S223J
R	645	RS1/16S102J
R	646	RS1/16S102J
R	647	RS1/16S473J
R	648	RS1/16S473J
R	649	RS1/16S473J
R	650	RS1/10S0R0J
R	651	RS1/10S471J

=====Circuit Symbol & No.===Part Name			Part No.
R	652		RS1/10S822J
R	660		RS1/16S221J
R	661		RAB4C221J
R	662		RS1/10S0R0J
R	663		RS1/16S102J
R	664		RS1/16S0R0J
R	665		RS1/16S0R0J
R	682		RS1/16S104J
R	683		RS1/16S103J
R	684		RS1/16S473J
R	685		RS1/16S471J
R	686		RS1/10S104J
R	687		RS1/10S102J
R	689		RS1/16S473J
R	690		RS1/16S102J
R	691		RS1/16S102J
R	692		RS1/16S102J
R	698		RS1/16S0R0J
R	730		RS1/16S472J
R	731		RS1/16S103J
R	732		RS1/4S681J
R	733		RS1/16S473J
R	734		RS1/16S103J
R	735		RS1/16S103J
R	736		RS1/10S473J
R	737		RS1/16S103J
R	738		RS1/10S103J
R	739		RS1/10S103J
R	740		RS1/10S333J
R	741		RS1/16S331J
R	742		RS1/16S224J
R	743		RS1/16S473J
R	745		RS1/16S0R0J
R	800		RS1/16S102J
R	801		RS1/16S102J
R	802		RS1/10S473J
R	803		RS1/10S473J
R	804		RS1/10S472J
R	805		RS1/10S473J
R	806		RS1/10S102J
R	807		RS1/10S102J
R	808		RS1/10S472J
R	810		RS1/10S472J
R	811		RD1/4PU271J
R	812		RD1/4PU271J
R	813		RS1/10S472J
R	814		RS1/10S271J
R	815		RS1/10S822J
R	816		RD1/4PU431J
R	818		RS1/10S822J
R	819		RD1/4PU122J
R	820		RS1/10S331J
R	821		RS1/10S102J
R	822		RS1/10S472J
R	823		RS1/10S273J
R	824		RS1/10S273J
R	825		RS1/10S102J
R	826		RS1/10S472J
R	827		RS1/10S221J
R	828		RS1/10S752J
R	829		RS1/10S472J
R	830		RS1/10S561J
R	831		RS1/16S103J
R	832		RS1/16S473J
R	833		RS1/10S473J
R	834		RS1/8S153J
R	835		RS1/10S473J
R	836		RS1/10S392J
R	837		RS1/10S223J
R	838		RS1/8S101J
R	839		RS1/16S472J
R	840		RS1/10S102J
R	841		RS1/10S473J
R	842		RS1/16S472J
R	843		RS1/10S472J
R	845		RS1/10S103J
R	846		RS1/8S103J
R	847		RS1/10S103J
R	848		RS1/10S102J
R	849		RS1/10S473J
R	850		RS1/10S473J
R	851		RS1/10S472J
R	852		RS1/10S103J
R	853		RS1/10S472J
R	854		RS1/10S472J
R	855		RS1/8S153J
R	860		RD1/4PU221J
R	870		RS1/16S102J
R	900		RS1/16S103J
R	901		RS1/16S103J
R	902		RS1/10S103J
R	903		RS1/16S0R0J
R	904		RS1/10S331J
R	905		RS1/10S103J
R	906		RS1/16S0R0J
R	907		RS1/16S331J
R	919		RS1/16S102J
R	920		RS1/10S471J
R	921		RS1/10S471J
R	922		RS1/10S471J
R	923		RS1/10S471J
R	924		RS1/10S471J
R	925		RS1/10S471J
R	926		RS1/10S471J
R	927		RS1/10S471J
R	928		RS1/16S472J
R	929		RS1/10S471J
R	930		RS1/10S471J
R	931		RS1/10S101J
R	932		RS1/10S101J
R	934		RS1/16S472J
R	935		RS1/10S471J
R	936		RS1/10S471J
R	938		RS1/10S473J
R	939		RS1/10S473J
R	942		RS1/10S473J
R	943		RS1/10S473J
R	944		RS1/10S473J
R	945		RS1/10S473J
R	947		RS1/16S101J
R	948		RS1/10S821J
R	949		RS1/10S103J
R	950		RS1/10S473J
R	951		RS1/10S103J
R	952		RS1/10S104J
R	953		RS1/10S104J
R	954		RS1/10S103J
R	955		RS1/16S104J
R	956		RS1/10S103J
R	957		RS1/16S103J

=====Circuit Symbol & No.===Part Name			Part No.
R	958		RS1/16S103J
R	959		RS1/16S103J
R	960		RS1/16S103J
R	961		RS1/16S103J
R	962		RS1/16S103J
R	963		RS1/10S821J
R	964		RS1/10S821J
R	965		RS1/10S821J
R	966		RS1/10S821J
R	967		RS1/10S821J
R	968		RS1/10S821J
R	969		RS1/10S223J
R	970		RS1/10S223J
R	971		RS1/10S223J
R	972		RS1/10S223J
R	973		RS1/10S223J
R	974		RS1/10S223J
R	975		RS1/16S822J
R	976		RS1/16S0R0J
R	977		RS1/16S0R0J
R	978		RS1/16S0R0J

CAPACITORS

C	60		CEJA100M16
C	61		CEJA100M16
C	62		CEJA100M16
C	63		CKSQYB104K50
C	64		CKSQYB104K50
C	65		CCSRCH270J50
C	66		CCSRCH270J50
C	100		CKSRYB471K50
C	101		CKSRYB471K50
C	102		CCSRCH101J50
C	103		CCSRCH101J50
C	104		CEJA220M16
C	105		CEJA101M16
C	106		CEJA4R7M35
C	107		CEJA4R7M35
C	108		CEJA4R7M35
C	109		CEJA1R0M50
C	110		CEJA4R7M35
C	111		CKSRYB102K50
C	112		CEJA330M16
C	113		CEJA100M16
C	115		CKSYB225K16
C	117		CKSYB225K16
C	118		CKSRYB102K50
C	119		CKSQYB225K10
C	120		CKSQYB225K10
C	121		CKSRYB102K50
C	122		CCSRCH101J50
C	123		CCSRCH101J50
C	150		CEJA100M16
C	151		CEJA100M16
C	152		CKSQYB103K50
C	153	470μF/6.3V	CCH1182
C	154		CEJA100M16
C	155		CEJA100M16
C	156		CKSYB475K10
C	160		CKSQYB104K50
C	161		CKSQYB105K16
C	162		CKSQYB105K16
C	163		CEJA100M16
C	164		CEJA100M16
C	165		CKSQYB105K16
C	166		CKSQYB105K16
C	167		CKSQYB104K50
C	168		CEJANP100M10

=====Circuit Symbol & No.===Part Name			Part No.
C	169		CEJANP100M10
C	170		CEJANP220M10
C	171		CEJANP220M10
C	185		CEJA100M16
C	186		CEJA100M16
C	187		CEJA1R0M50
C	200		CKSQYB104K50
C	201		CKSQYB104K50
C	202		CKSQYB104K50
C	203		CEJANP100M10
C	204		CEJANP100M10
C	205		CEJANP100M10
C	206		CEJANP100M10
C	207		CCSQCH101J50
C	208		CCSQCH101J50
C	209		CEJA4R7M35
C	210		CCSQCH101J50
C	211		CCSQCH101J50
C	212		CEJA4R7M35
C	213		CKSQYB471K50
C	214		CEJA101M10
C	230		CKSQYB104K50
C	231		CKSRYB153K25
C	232		CEJAR10M50
C	233		CEJA100M16
C	234		CCSRCH101J50
C	235		CEJA101M16
C	236		CKSQYB104K50
C	237		CEJANPR10M50
C	238		CKSRYB473K25
C	239		CKSRYB222K50
C	240		CKSRYB473K25
C	241		CEJANP100M16
C	242		CEJANP100M16
C	243		CEJA100M16
C	244		CKSRYB104K16
C	259		CKSRYB221K50
C	260		CCSQCH180J50
C	261		CEJAR10M50
C	262		CKSQYB103K50
C	263		CCSQCH180J50
C	264		CKSQYB224K25
C	265		CEJA1R0M50
C	266		CKSQYB105K16
C	267		CEJA1R0M50
C	268		CEJA100M16
C	269		CEJA4R7M35
C	270		CKSQYB103K50
C	271		CCSQCH470J50
C	272		CEJA1R0M50
C	273		CKSQYB104K50
C	274		CEJA100M16
C	275		CKSQYB103K50
C	276		CCSQCH100J50
C	277		CKSQYB104K50
C	278		CKSQYB103K50
C	279		CKSQYB103K50
C	280		CKSQYB103K50
C	281		CEJA470M10
C	282		CKSQYB104K50
C	283		CEJA100M16
C	285		CKSQYB103K50
C	286		CKSQYB105K16
C	287		CKSQYB103K50
C	288		CKSQYB103K50

=====Circuit Symbol & No.		===Part Name	Part No.
C	289		CKSQYB471K50
C	290		CEJA1R0M50
C	291		CKSQYB103K50
C	292		CKSQYB472K50
C	293		CCSQCH100J50
C	294		CKSQYB103K50
C	295		CKSQYB103K50
C	300		CEJA470M10
C	301		CKSRYB103K50
C	302		CEJA100M16
C	303		CKSQYB221K50
C	304		CEJA100M16
C	305		CKSQYB221K50
C	306		CKSQYB105K16
C	307		CKSQYB105K16
C	308		CKSQYB105K16
C	309		CKSQYB221K50
C	310		CKSQYB105K16
C	311		CKSQYB105K16
C	312		CKSQYB105K16
C	316		CEJA100M16
C	317		CKSQYB105K16
C	318		CEJA100M16
C	319		CEJA100M16
C	321		CKSQYB103K50
C	322		CKSQYB103K50
C	323		CKSQYB105K16
C	325		CKSQYB103K50
C	328		CKSQYB103K50
C	350		CEJA1R0M50
C	351		CKSQYB103K50
C	352		CEJA470M6R3
C	353		CKSQYB103K50
C	354		CEJA220M10
C	355		CEJA221M6R3
C	356		CKSQYB103K50
C	357		CEJA470M6R3
C	359	470µF/6.3V	CCH1182
C	360	470µF/6.3V	CCH1182
C	361	470µF/6.3V	CCH1182
C	400		CKSQYB103K50
C	401		CKSQYB123K50
C	402		CKSQYB123K50
C	403		CKSQYB102K50
C	405	330µF/10V	CCH1181
C	406		CKSQYB472K50
C	407		CKSQYB182K50
C	408		CEJA1R0M50
C	409		CEJA1R0M50
C	411		CKSQYB473K50
C	413		CEJA101M16
C	414		CKSQYB223K50
C	416		CKSQYB223K50
C	417		CKSQYB472K50
C	418		CKSQYB105K16
C	419		CKSQYB105K16
C	424		CCSRCH101J50
C	480		CCSRCH101J50
C	481		CKSRYB102K50
C	482		CEJA100M16
C	501		CEJA220M10
C	503		CKSRYB104K16
C	505		CCSRCH471J50
C	506		CCSRCH471J50
C	507		CKSRYB104K16
C	509		CCSQCH270J50
C	510		CCSQCH270J50
C	513		CCSRCH101J50
C	514		CCSRCH101J50
C	600		CKSQYB103K50
C	601		CKSRYB102K50
C	602		CCSRCH101J50
C	603		CKSRYB102K50
C	604		CCSRCH102J50
C	605		CCSRCH101J50
C	606		CKSQYB104K50
C	607		CKSRYB104K16
C	608		CCSRCH270J50
C	609		CCSRCH270J50
C	610		CCSRCH101J50
C	611		CCSRCH101J50
C	650		CEJA2R2M50
C	660		CCSRCH220J50
C	661		CCSRCH220J50
C	662		CCSRCH220J50
C	663		CCSRCH220J50
C	664		CCSRCH220J50
C	665	0.1F/5.5V	CCL1023
C	666		CKSQYB104K50
C	667		CEJA470M16
C	668		CKSQYB105K16
C	669		CCSRCH220J50
C	670		CCSRCH220J50
C	671		CCSRCH220J50
C	672		CCSRCH220J50
C	673		CCSRCH220J50
C	674		CCSRCH220J50
C	682		CEJANP1R0M50
C	685		CEJANP1R0M50
C	686		CKSQYB104K50
C	687		CKSQYB104K50
C	688		CKSQYB103K50
C	689		CKSQYB105K16
C	730		CKSRYB472K50
C	800		CKSYB225K16
C	801		CKSYB225K16
C	802	330µF/10V	CCH1181
C	803		CKSRYB103K50
C	804	330µF/10V	CCH1181
C	805		CKSRYB103K50
C	806		CKSQYB104K50
C	807		CEJA101M16
C	808		CKSQYB104K50
C	809	330µF/10V	CCH1181
C	810		CKSYB225K16
C	811	1000µF/16V	CCH1003
C	812		CEJA101M10
C	813	330µF/10V	CCH1181
C	814		CKSQYB103K50
C	815		CKSQYB103K50
C	816		CEJA100M16
C	817		CEJA220M10
C	818		CEJA101M16
C	819		CKSQYB103K50
C	820		CEJA470M10
C	821		CEJA101M16
C	822		CKSQYB472K50
C	823		CKSQYB103K50
C	824		CKSQYB103K50
C	825		CEJA101M16

=====Circuit Symbol & No.===Part Name Part No.

C	826	2200μF/16V	CCH1186
C	827	1000μF/16V	CCH1003
C	829		CEJA101M16
C	830		CKSQYB103K50
C	831		CKSQYB472K50
C	833		CKSQYB472K50
C	834		CCSRCH101J50
C	860		CKSQYB103K50
C	861		CEJA100M16
C	862		CKSQYB103K50
C	902		CEJA100M16
C	903		CEJA100M16
C	904		CKSYB475K16
C	905		CKSYB475K16
C	906	10.0μF/16V	CCG1143
C	907	10.0μF/16V	CCG1143
C	908		CKSYB104K50
C	909		CEJA330M16
C	910		CEAT682M16
C	911		CEJA330M16
C	912		CKSQYB473K50
C	913		CKSYB104K50
C	914	3300μF/16V	CCH1344
C	916		CEJA4R7M35
C	917		CEJA4R7M35
C	919		CKSYB105K16
C	920		CEJA4R7M35
C	921		CEJA4R7M35
C	922		CEJA4R7M35
C	923		CEJA4R7M35
C	925		CKSYB225K16
C	926		CKSYB225K16
C	927		CKSYB225K16
C	928		CKSYB225K16
C	929		CKSYB225K16
C	930		CKSYB225K16
C	931		CKSYB225K16
C	932		CKSYB225K16
C	933		CEJA4R7M35
C	934		CEJA4R7M35
C	935		CKSQYB224K16
C	936		CCSRCH560J50
C	937		CKSYB225K16
C	938		CKSYB225K16
C	939		CKSQYB224K16
C	940		CKSYB225K16
C	941		CKSYB225K16
C	942		CCSRCH560J50
C	943		CEJA100M16
C	944		CEJA100M16
C	945		CEJA100M16
C	946		CEJA100M16
C	947		CEJA100M16
C	948		CEJA100M16
C	949		CEJA100M16
C	950		CKSQYB102K50
C	951		CKSQYB102K50
C	952		CKSQYB102K50
C	953		CKSQYB102K50
C	954		CKSQYB102K50
C	955		CKSQYB102K50
C	978		CKSRYB103K50
C	979		CKSRYB104K16

=====Circuit Symbol & No.===Part Name Part No.

A Unit Number : CWM7152 (AVM-P9000/ES)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC	100	IC	BA3121F
IC	101	IC	BA3129F
IC	150	IC	NJM2246M
IC	160	IC	TA2050S
IC	161	IC	CA0008AM
IC	185	IC	NJM4558MD
IC	200	IC	NJM4558MD
IC	230	IC	NJM4558MD
IC	231	IC	TDA7052BT
IC	232	IC	NJM4558MD
IC	260	IC	CXA2060BS
IC	261	IC	TC74VHC123AFT
IC	263	IC	NJM2235V
IC	264	IC	TC7SH04FU
IC	265	IC	NJM2246M
IC	266	IC	NJM2246M
IC	267	IC	NJM2246M
IC	268	IC	TC7SH04FU
IC	350	IC	NJM2267M
IC	351	IC	BA7623F
IC	480	IC	S-81250SGUP
IC	600	IC	PDH028A
IC	601	IC	PE5153A
IC	650	IC	S-80734ANDYI
IC	681	IC	BA3834F
IC	800	IC	BA05ST-V5
IC	801	IC	BA05ST-V5
IC	802	IC	BA05ST-V5
IC	803	IC	BA09SFP
IC	900	IC	PAL005A
IC	901	IC	PAL005A
IC	920	IC	NJU7032M
IC	921	IC	NJM2068MD
IC	922	IC	NJU7032M
Q	100	Transistor	DTC124EK
Q	101	Transistor	FMG12
Q	102	Transistor	DTA114EK
Q	150	Transistor	2SA1037K
Q	151	Transistor	FMG12
Q	152	Transistor	DTA114EK
Q	160	Transistor	2SA1037K
Q	161	Transistor	DTC124EK
Q	200	Transistor	2SC2412K
Q	230	Transistor	DTC124EK
Q	261	Transistor	2SA1037K
Q	262	Transistor	2SC2412K
Q	263	Transistor	2SC2412K
Q	264	Transistor	2SC2412K
Q	265	Transistor	2SC2412K
Q	266	Transistor	2SA1037K
Q	267	Transistor	2SA1037K
Q	268	Transistor	2SC2412K
Q	269	Transistor	2SA1037K
Q	270	Transistor	2SA1037K
Q	271	Transistor	2SA1037K
Q	350	Transistor	DTA143EK
Q	351	Transistor	DTC323TU
Q	352	Transistor	FMG12
Q	353	Transistor	DTA114EK
Q	400	Transistor	2SC2412K

=====Circuit Symbol & No.===Part Name			Part No.
Q	600	Transistor	DTA144EU
Q	601	Transistor	2SC2412K
Q	680	Transistor	2SC2412K
Q	681	Transistor	DTC124TK
Q	730	Transistor	2SC2412K
Q	731	Transistor	DTC144EK
Q	732	Transistor	2SC2412K
Q	733	Transistor	2SC2412K
Q	734	Transistor	DTC124EK
Q	735	Transistor	2SA1037K
Q	736	Transistor	IMD2A
Q	737	Transistor	DTA124EU
Q	738	Transistor	2SC2412K
Q	800	Transistor	DTA124EK
Q	801	Transistor	2SA1797
Q	802	Transistor	DTC114EK
Q	803	Transistor	2SD1857
Q	804	Transistor	2SD2396
Q	805	Transistor	2SB1184F5
Q	806	Transistor	2SC2412K
Q	807	Transistor	2SA1797
Q	808	Transistor	2SA1797
Q	809	Transistor	DTC144EK
Q	810	Transistor	2SC2412K
Q	811	Transistor	2SA1037K
Q	812	Transistor	2SD1760F5
Q	813	Transistor	2SD2396
Q	814	Transistor	2SC2412K
Q	815	Transistor	DTA124EK
Q	816	Transistor	2SA1037K
Q	817	Transistor	IMD2A
Q	818	Transistor	DTC144EK
Q	819	Transistor	IMX1
Q	820	Transistor	2SA1037K
Q	821	Transistor	DTC124EK
Q	860	Transistor	2SD1859
Q	861	Transistor	IMD3A
Q	900	Transistor	DTC114TK
Q	920	Transistor	IMD2A
Q	921	Transistor	DTA124EK
Q	922	Transistor	FMG12
Q	923	Transistor	IMD2A
Q	924	Transistor	FMG12
Q	925	Transistor	FMG12
Q	926	Transistor	FMG12
Q	927	Transistor	IMH3A
Q	928	Transistor	FMG12
Q	929	Transistor	FMG12
Q	932	Transistor	DTC323TK
Q	933	Transistor	DTC323TK
Q	934	Transistor	FMG13
Q	935	Transistor	FMG13
Q	936	Transistor	FMG13
D	100	Diode	UDZ12(B)
D	101	Diode	UDZ12(B)
D	102	Diode	MA110
D	103	Diode	UDZ12(B)
D	185	Diode	UDZ12(B)
D	200	Diode	UDZ12(B)
D	201	Diode	MA110
D	260	Diode	MA110
D	261	Diode	MA110
D	262	Diode	MA8039(H)
D	263	Diode	MA152WK
D	350	Diode	UDZ12(B)

=====Circuit Symbol & No.===Part Name			Part No.
D	351	Diode	UDZ12(B)
D	352	Diode	UDZ12(B)
D	353	Diode	UDZ12(B)
D	354	Diode	UDZ12(B)
D	355	Diode	UDZ12(B)
D	357	Diode	UDZ12(B)
D	358	Diode	UDZ12(B)
D	359	Diode	UDZ12(B)
D	360	Diode	UDZ12(B)
D	361	Diode	UDZ12(B)
D	480	Diode	HZS16L(1)
D	650	Diode	MA152WK
D	651	Diode	MA110
D	660	Diode	1SS133
D	661	Diode	UDZ12(B)
D	730	Diode	HZS9L(A2)
D	731	Diode	MA111
D	732	Diode	HZS9L(A2)
D	733	Diode	MA152WK
D	734	Diode	MA152WK
D	800	Diode	ERA15-02VH
D	801	Diode	HZS6L(B1)
D	802	Diode	HZS9L(B3)
D	803	Diode	1SS133
D	804	Diode	MA152WK
D	805	Diode	HZS6L(C3)
D	806	Diode	HZS9L(B3)
D	807	Diode	MA152WK
D	808	Diode	ERA15-02VH
D	809	Diode	MA152WK
D	810	Diode	UDZ7R5(B)
D	811	Diode	HZS7L(A1)
D	814	Diode	ERA15-02VH
D	816	Diode	ERA15-02VH
D	817	Diode	ERA15-02VH
D	818	Diode	ERA15-02VH
D	819	Diode	ERA15-02VH
D	820	Diode	ERA15-02VH
D	821	Diode	ERA15-02VH
D	823	Diode	1SR154-400
D	824	Diode	1SR154-400
D	825	Diode	1SR154-400
D	826	Diode	1SR154-400
D	860	Diode	UDZ12(B)
D	921	Diode	MA152WK
L	100	Inductor	LCTB2R2K2125
L	101	Inductor	LCTB2R2K2125
L	150	Inductor	LCTB4R7K2125
L	151	Inductor	LCTA220J3225
L	160	Inductor	LCTB3R3K2125
L	200	Inductor	LCTA1R5J3225
L	260	Chip-Inductor	LCTA2R2J3225
L	261	Chip-Inductor	LCTA2R2J3225
L	263	Inductor	CTF1305
L	264	Inductor	CTF1305
L	265	Inductor	LCTB2R2K2125
L	266	Inductor	CTF1305
L	267	Inductor	LCTB2R2K2125
L	268	Inductor	LCTB2R2K2125
L	269	Inductor	CTF1306
L	270	Inductor	LCTB4R7K2125
L	271	Inductor	LCTB4R7K2125
L	272	Inductor	LCTB4R7K2125
L	274	Inductor	LCTB100K2125
L	275	Inductor	CTF1305

=====Circuit Symbol & No.===Part Name			Part No.
L	276	Inductor	CTF1399
L	350	Inductor	LCTA680J3225
L	351	Inductor	LCTA680J3225
L	353	Inductor	CTF1305
L	355	Inductor	CTF1305
L	356	Inductor	CTF1305
L	357	Inductor	CTF1305
L	358	Inductor	CTF1399
L	359	Inductor	CTF1399
L	400	Inductor	LCTB4R7K2125
L	408	Inductor	CTF1399
L	409	Inductor	CTF1306
L	410	Inductor	CTF1306
L	411	Inductor	CTF1306
L	412	Inductor	CTF1306
L	413	Chip-Inductor	LCTA2R2J3225
L	418	Ferri-Inductor	LAU2R2K
L	419	Inductor	CTF1399
L	600	Inductor	CTF1306
L	601	Inductor	CTF1420
L	602	Inductor	CTF1470
L	603	Inductor	CTF1306
L	604	Inductor	CTF1306
L	605	Inductor	CTF1399
L	606	Inductor	CTF1399
L	607	Inductor	CTF1306
L	608	Inductor	CTF1410
L	650	Inductor	CTF1399
L	660	Inductor-Array	CTF1421
L	661	Inductor-Array	CTF1421
L	662	Inductor	CTF1306
L	663	Inductor	CTF1306
L	664	Inductor	CTF1306
L	665	Inductor	CTF1306
L	666	Inductor	CTF1409
L	668	Inductor	CTF1306
L	669	Inductor	CTF1306
L	670	Inductor	CTF1306
L	672	Inductor	CTF1306
L	673	Inductor	CTF1409
L	674	Inductor	CTF1409
L	675	Inductor	CTF1409
L	676	Inductor	CTF1409
L	677	Inductor	CTF1306
L	680	Inductor	CTF1399
L	681	Inductor	CTF1399
L	682	Inductor-Array	CTF1421
L	683	Inductor	CTF1306
L	800	Inductor	CTF1420
L	801	Inductor	CTF1420
L	802	Choke Coil 100μH	CTH1157
L	803	Choke Coil 390mH	CTH1209
L	804	Ferri-Inductor	LAU2R2K
L	805	Chip-Inductor	LCTA2R2J3225
L	806	Choke Coil 600mH	CTH1171
L	807	Choke Coil 600mH	CTH1171
L	809	Inductor	CTF1399
L	810	Inductor	CTF1489
L	980	Inductor	CTF1409
X	260	Crystal Resonator 4.433619MHz	CSS1460
X	261	Crystal Resonator 3.579545MHz	CSS1465
X	600	Radiator 12.5829MHz	CSS1495
S	650	Switch(RESET)	CSG1046
VR	260	Semi-fixed 100kΩ(B)	CCP1133
FU	100	Micro-Fuse 2A	CEK1190

=====Circuit Symbol & No.===Part Name			Part No.
FU	150	Micro-Fuse 2A	CEK1190
FU	180	Micro-Fuse 2A	CEK1190
FU	200	Micro-Fuse 2A	CEK1190
FU	350	Micro-Fuse 2A	CEK1190
FU	351	Micro-Fuse 2A	CEK1190
FU	352	Micro-Fuse 2A	CEK1190
FU	800	Micro-Fuse 800mA	CEK1206
FU	801	Micro-Fuse 2A	CEK1190
FU	860	Micro-Fuse 400mA	CEK1184
		GDC Unit	CWM7146
		DSP Unit	CWM7147
		FM/AM Tuner Unit	CWE1501
AR	400	Surge Protector	DSPS-201M-S00B

RESISTORS

R	100		RS1/10S0R0J
R	101		RS1/10S0R0J
R	102		RS1/16S750J
R	103		RS1/10S123J
R	104		RS1/10S123J
R	105		RS1/16S123J
R	106		RS1/16S123J
R	107		RS1/10S102J
R	108		RS1/10S102J
R	109		RS1/10S220J
R	110		RS1/16S0R0J
R	111		RS1/16S0R0J
R	112		RS1/16S102J
R	113		RS1/16S102J
R	114		RS1/16S104J
R	115		RS1/16S104J
R	116		RS1/16S104J
R	117		RS1/16S104J
R	118		RS1/16S123J
R	119		RS1/16S133J
R	120		RS1/16S473J
R	121		RS1/16S153J
R	122		RS1/16S153J
R	123		RS1/16S473J
R	124		RS1/16S362J
R	125		RS1/16S223J
R	126		RS1/16S223J
R	127		RS1/16S362J
R	128		RS1/10S220J
R	129		RS1/10S821J
R	130		RS1/10S821J
R	131		RS1/16S104J
R	132		RS1/16S473J
R	133		RS1/16S0R0J
R	135		RS1/16S0R0J
R	136		RS1/16S223J
R	137		RS1/16S0R0J
R	140		RS1/16S223J
R	150		RS1/10S471J
R	151		RS1/10S471J
R	152		RS1/10S681J
R	153		RS1/10S0R0J
R	154		RS1/10S101J
R	155		RS1/10S0R0J
R	156		RS1/16S270J
R	157		RS1/16S330J
R	160		RS1/10S101J
R	161		RS1/10S620J
R	162		RS1/10S101J
R	163		RS1/10S181J

=====Circuit Symbol & No.		===Part Name	Part No.
R	164		RS1/10S223J
R	165		RS1/10S102J
R	166		RS1/16S102J
R	167		RS1/10S223J
R	168		RS1/16S181J
R	169		RS1/16S183J
R	170		RS1/10S222J
R	171		RS1/16S102J
R	172		RS1/16S102J
R	173		RS1/10S472J
R	174		RS1/10S223J
R	175		RS1/16S473J
R	176		RS1/16S473J
R	177		RS1/10S0R0J
R	178		RS1/16S0R0J
R	179		RS1/16S0R0J
R	185		RS1/16S0R0J
R	186		RS1/16S0R0J
R	187		RS1/16S0R0J
R	188		RS1/16S101J
R	189		RS1/16S473J
R	190		RS1/16S473J
R	191		RS1/16S0R0J
R	192		RS1/16S103J
R	193		RS1/16S103J
R	194		RS1/16S473J
R	195		RS1/16S473J
R	200		RS1/10S750J
R	201		RS1/10S102J
R	202		RS1/10S102J
R	203		RS1/10S473J
R	204		RS1/4S101J
R	205		RS1/16S104J
R	206		RS1/16S104J
R	207		RS1/16S102J
R	208		RS1/16S104J
R	209		RS1/16S104J
R	210		RS1/16S102J
R	211		RN1/16SE1002D
R	212		RN1/16SE1002D
R	213		RN1/16SE1002D
R	214		RN1/16SE1002D
R	215		RN1/16SE3001D
R	216		RN1/16SE3001D
R	217		RN1/16SE3001D
R	218		RN1/16SE3001D
R	219		RS1/10S103J
R	220		RS1/10S103J
R	231		RS1/16S223J
R	233		RS1/16S223J
R	234		RS1/16S222J
R	235		RS1/16S0R0J
R	236		RS1/16S104J
R	237		RS1/16S223J
R	238		RS1/16S561J
R	239		RS1/16S223J
R	241		RS1/16S473J
R	242		RS1/16S101J
R	243		RS1/16S101J
R	244		RS1/16S473J
R	245		RS1/16S104J
R	246		RS1/16S104J
R	247		RS1/16S222J
R	248		RS1/16S222J
R	249		RS1/16S473J
R	250		RS1/16S473J
R	259		RS1/16S750J
R	260		RS1/16S0R0J
R	261		RS1/10S471J
R	262		RS1/10S0R0J
R	264		RS1/10S101J
R	265		RS1/16S473J
R	266		RS1/10S0R0J
R	267		RS1/10S471J
R	268		RS1/10S471J
R	269		RS1/16S0R0J
R	270		RS1/16S471J
R	271		RS1/10S103J
R	272		RS1/10S102J
R	273		RN1/10SE1002D
R	274		RS1/10S471J
R	275		RS1/10S471J
R	276		RS1/10S0R0J
R	277		RS1/10S0R0J
R	278		RN1/10SE1002D
R	279		RS1/10S681J
R	281		RS1/10S102J
R	282		RS1/10S222J
R	283		RS1/10S123J
R	284		RS1/10S222J
R	285		RN1/10SE1002D
R	286		RS1/10S101J
R	287		RS1/10S101J
R	288		RS1/10S222J
R	289		RS1/10S101J
R	290		RS1/10S101J
R	291		RS1/10S103J
R	292		RS1/10S103J
R	293		RS1/10S331J
R	294		RS1/10S102J
R	295		RS1/10S331J
R	296		RS1/10S102J
R	297		RS1/10S331J
R	298		RS1/10S102J
R	299		RS1/16S471J
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R	302		RS1/16S471J
R	303		RS1/16S471J
R	304		RS1/16S471J
R	305		RS1/10S0R0J
R	306		RS1/10S0R0J
R	307		RS1/10S0R0J
R	309		RS1/10S0R0J
R	310		RS1/10S0R0J
R	311		RS1/10S0R0J
R	350		RS1/10S104J
R	351		RS1/10S750J
R	352		RS1/10S750J
R	353		RS1/10S750J
R	354		RS1/10S750J
R	355		RS1/16S0R0J
R	360		RS1/16S0R0J
R	364		RS1/16S0R0J
R	365		RS1/16S0R0J
R	366		RS1/16S0R0J
R	368		RS1/10S0R0J
R	370		RS1/10S0R0J
R	371		RS1/16S0R0J
R	400		RS1/10S0R0J

=====Circuit Symbol & No.===Part Name			Part No.
R	401		RS1/10S473J
R	402		RS1/16S103J
R	403		RS1/10S473J
R	404		RS1/10S681J
R	405		RS1/10S681J
R	406		RS1/10S272J
R	407		RS1/10S272J
R	408		RS1/10S102J
R	410		RS1/16S393J
R	411		RS1/10S162J
R	412		RS1/10S162J
R	414		RS1/16S0R0J
R	415		RS1/16S0R0J
R	417		RS1/16S681J
R	418		RS1/10S0R0J
R	419		RS1/16S681J
R	420		RS1/16S681J
R	421		RS1/16S681J
R	424		RS1/16S473J
R	425		RS1/16S473J
R	426		RS1/10S473J
R	427		RS1/16S472J
R	429		RS1/16S473J
R	430		RS1/16S0R0J
R	431		RS1/16S0R0J
R	445		RS1/16S0R0J
R	446		RS1/16S0R0J
R	480		RS1/8S151J
R	491		RS1/16S0R0J
R	492		RS1/10S0R0J
R	601		RS1/16S0R0J
R	602		RS1/16S102J
R	603		RS1/16S102J
R	604		RS1/16S102J
R	605		RS1/16S222J
R	606		RS1/16S222J
R	607		RS1/16S473J
R	609		RS1/16S473J
R	610		RS1/16S473J
R	613		RAB4C471J
R	614		RAB4C221J
R	616		RS1/16S473J
R	617		RS1/16S102J
R	618		RS1/16S221J
R	619		RS1/16S473J
R	620		RS1/10S102J
R	621		RS1/16S101J
R	622		RS1/16S103J
R	623		RS1/16S101J
R	624		RS1/16S103J
R	626		RS1/16S473J
R	628		RS1/16S473J
R	629		RS1/16S471J
R	630		RS1/16S102J
R	631		RS1/16S473J
R	632		RS1/16S473J
R	633		RS1/16S681J
R	634		RS1/16S0R0J
R	635		RS1/16S0R0J
R	636		RS1/16S0R0J
R	637		RS1/16S0R0J
R	638		RS1/16S473J
R	639		RS1/16S473J
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R	647		RS1/16S473J
R	648		RS1/16S473J
R	649		RS1/16S473J
R	650		RS1/10S0R0J
R	651		RS1/10S471J
R	652		RS1/10S822J
R	660		RS1/16S221J
R	661		RAB4C221J
R	662		RS1/10S0R0J
R	663		RS1/16S102J
R	664		RS1/16S0R0J
R	665		RS1/16S0R0J
R	682		RS1/16S104J
R	683		RS1/16S103J
R	684		RS1/16S473J
R	685		RS1/16S471J
R	686		RS1/10S104J
R	687		RS1/10S102J
R	689		RS1/16S473J
R	690		RS1/16S102J
R	691		RS1/16S102J
R	692		RS1/16S102J
R	698		RS1/16S0R0J
R	730		RS1/16S472J
R	731		RS1/16S103J
R	732		RS1/4S681J
R	733		RS1/16S473J
R	734		RS1/16S103J
R	735		RS1/16S103J
R	736		RS1/10S473J
R	737		RS1/16S103J
R	738		RS1/10S103J
R	739		RS1/10S103J
R	740		RS1/10S333J
R	741		RS1/16S331J
R	742		RS1/16S224J
R	743		RS1/16S473J
R	745		RS1/16S0R0J
R	800		RS1/16S102J
R	801		RS1/16S102J
R	802		RS1/10S473J
R	803		RS1/10S473J
R	804		RS1/10S472J
R	805		RS1/10S473J
R	806		RS1/10S102J
R	807		RS1/10S102J
R	808		RS1/10S472J
R	810		RS1/10S472J
R	811		RD1/4PU271J
R	812		RD1/4PU271J
R	813		RS1/10S472J
R	814		RS1/10S271J
R	815		RS1/10S822J
R	816		RD1/4PU431J
R	818		RS1/10S822J
R	819		RD1/4PU122J
R	820		RS1/10S331J
R	821		RS1/10S102J
R	822		RS1/10S472J
R	823		RS1/10S273J

=====Circuit Symbol & No.===Part Name			Part No.
R	824		RS1/10S273J
R	825		RS1/10S102J
R	826		RS1/10S472J
R	827		RS1/10S221J
R	828		RS1/10S752J
R	829		RS1/10S472J
R	830		RS1/10S561J
R	831		RS1/16S103J
R	832		RS1/16S473J
R	833		RS1/10S473J
R	834		RS1/8S153J
R	835		RS1/10S473J
R	836		RS1/10S392J
R	837		RS1/10S223J
R	838		RS1/8S101J
R	839		RS1/16S472J
R	840		RS1/10S102J
R	841		RS1/10S473J
R	842		RS1/16S472J
R	843		RS1/10S472J
R	845		RS1/10S103J
R	846		RS1/8S103J
R	847		RS1/10S103J
R	849		RS1/10S473J
R	850		RS1/10S473J
R	852		RS1/10S103J
R	853		RS1/10S472J
R	860		RD1/4PU221J
R	870		RS1/16S102J
R	900		RS1/16S103J
R	901		RS1/16S103J
R	902		RS1/10S103J
R	903		RS1/16S0R0J
R	904		RS1/10S331J
R	905		RS1/10S103J
R	906		RS1/16S0R0J
R	907		RS1/16S331J
R	919		RS1/16S102J
R	920		RS1/10S471J
R	921		RS1/10S471J
R	922		RS1/10S471J
R	923		RS1/10S471J
R	924		RS1/10S471J
R	925		RS1/10S471J
R	926		RS1/10S471J
R	927		RS1/10S471J
R	928		RS1/16S472J
R	929		RS1/10S471J
R	930		RS1/10S471J
R	931		RS1/10S101J
R	932		RS1/10S101J
R	934		RS1/16S472J
R	935		RS1/10S471J
R	936		RS1/10S471J
R	938		RS1/10S473J
R	939		RS1/10S473J
R	942		RS1/10S473J
R	943		RS1/10S473J
R	944		RS1/10S473J
R	945		RS1/10S473J
R	947		RS1/16S101J
R	948		RS1/10S821J
R	949		RS1/10S103J
R	950		RS1/10S473J
R	951		RS1/10S103J

=====Circuit Symbol & No.===Part Name			Part No.
R	952		RS1/10S104J
R	953		RS1/10S104J
R	954		RS1/10S103J
R	955		RS1/16S104J
R	956		RS1/10S103J
R	957		RS1/16S103J
R	958		RS1/16S103J
R	959		RS1/16S103J
R	960		RS1/16S103J
R	961		RS1/16S103J
R	962		RS1/16S103J
R	963		RS1/10S821J
R	964		RS1/10S821J
R	965		RS1/10S821J
R	966		RS1/10S821J
R	967		RS1/10S821J
R	968		RS1/10S821J
R	969		RS1/10S223J
R	970		RS1/10S223J
R	971		RS1/10S223J
R	972		RS1/10S223J
R	973		RS1/10S223J
R	974		RS1/10S223J
R	975		RS1/16S822J
R	976		RS1/16S0R0J
R	977		RS1/16S0R0J
R	978		RS1/16S0R0J

CAPACITORS

C	100		CKSRYB471K50
C	101		CKSRYB471K50
C	102		CCSRCH101J50
C	103		CCSRCH101J50
C	104		CEJA220M16
C	105		CEJA101M16
C	106		CEJA4R7M35
C	107		CEJA4R7M35
C	108		CEJA4R7M35
C	109		CEJA1R0M50
C	110		CEJA4R7M35
C	111		CKSRYB102K50
C	112		CEJA330M16
C	113		CEJA100M16
C	115		CKSYB225K16
C	117		CKSYB225K16
C	118		CKSRYB102K50
C	119		CKSQYB225K10
C	120		CKSQYB225K10
C	121		CKSRYB102K50
C	122		CCSRCH101J50
C	123		CCSRCH101J50
C	150		CEJA100M16
C	151		CEJA100M16
C	152		CKSQYB103K50
C	153	470μF/6.3V	CCH1182
C	154		CEJA100M16
C	155		CEJA100M16
C	156		CKSYB475K10
C	160		CKSQYB104K50
C	161		CKSQYB105K16
C	162		CKSQYB105K16
C	163		CEJA100M16
C	164		CEJA100M16
C	165		CKSQYB105K16

=====Circuit Symbol & No.===Part Name			Part No.
C	166		CKSQYB105K16
C	167		CKSQYB104K50
C	168		CEJANP100M10
C	169		CEJANP100M10
C	170		CEJANP220M10
C	171		CEJANP220M10
C	185		CEJA100M16
C	186		CEJA100M16
C	187		CEJA1R0M50
C	200		CKSQYB104K50
C	201		CKSQYB104K50
C	202		CKSQYB104K50
C	203		CEJANP100M10
C	204		CEJANP100M10
C	205		CEJANP100M10
C	206		CEJANP100M10
C	207		CCSQCH101J50
C	208		CCSQCH101J50
C	209		CEJA4R7M35
C	210		CCSQCH101J50
C	211		CCSQCH101J50
C	212		CEJA4R7M35
C	213		CKSQYB471K50
C	214		CEJA101M10
C	230		CKSQYB104K50
C	231		CKSRYB681K50
C	232		CEJAR10M50
C	233		CEJA100M16
C	234		CCSRCH101J50
C	235		CEJA101M16
C	236		CKSQYB104K50
C	237		CEJANPR10M50
C	238		CKSRYB473K25
C	239		CKSRYB222K50
C	240		CKSRYB473K25
C	241		CEJANP100M16
C	242		CEJANP100M16
C	243		CEJA100M16
C	244		CKSRYB104K16
C	259		CKSRYB221K50
C	260		CCSQCH180J50
C	261		CEJAR10M50
C	262		CKSQYB103K50
C	263		CCSQCH180J50
C	264		CKSQYB224K25
C	265		CEJA1R0M50
C	266		CKSQYB105K16
C	267		CEJA1R0M50
C	268		CEJA100M16
C	269		CEJA4R7M35
C	270		CKSQYB103K50
C	271		CCSQCH470J50
C	272		CEJA1R0M50
C	273		CKSQYB104K50
C	274		CEJA100M16
C	275		CKSQYB103K50
C	276		CCSQCH100J50
C	277		CKSQYB104K50
C	278		CKSQYB103K50
C	279		CKSQYB103K50
C	280		CKSQYB103K50
C	281		CEJA470M10
C	282		CKSQYB104K50
C	283		CEJA100M16
C	285		CKSQYB103K50

=====Circuit Symbol & No.===Part Name			Part No.
C	286		CKSQYB105K16
C	287		CKSQYB103K50
C	288		CKSQYB103K50
C	289		CKSQYB471K50
C	290		CEJA1R0M50
C	291		CKSQYB103K50
C	292		CKSQYB472K50
C	293		CCSQCH100J50
C	294		CKSQYB103K50
C	295		CKSQYB103K50
C	300		CEJA470M10
C	301		CKSRYB103K50
C	302		CEJA100M16
C	303		CKSQYB221K50
C	304		CEJA100M16
C	305		CKSQYB221K50
C	306		CKSQYB105K16
C	307		CKSQYB105K16
C	308		CKSQYB105K16
C	309		CKSQYB221K50
C	313		CKSQYB103K50
C	314		CKSQYB103K50
C	315		CKSQYB103K50
C	316		CEJA100M16
C	317		CKSQYB105K16
C	318		CEJA100M16
C	319		CEJA100M16
C	321		CKSQYB103K50
C	322		CKSQYB103K50
C	323		CKSQYB105K16
C	325		CKSQYB103K50
C	328		CKSQYB103K50
C	350		CEJA1R0M50
C	351		CKSQYB103K50
C	352		CEJA470M6R3
C	353		CKSQYB103K50
C	354		CEJA220M10
C	355		CEJA221M6R3
C	356		CKSQYB103K50
C	357		CEJA470M6R3
C	359	470µF/6.3V	CCH1182
C	360	470µF/6.3V	CCH1182
C	361	470µF/6.3V	CCH1182
C	400		CKSQYB103K50
C	401		CKSQYB183K50
C	402		CKSQYB183K50
C	403		CKSQYB102K50
C	405	330µF/10V	CCH1181
C	406		CKSQYB472K50
C	410		CKSQYB223K50
C	411		CKSQYB473K50
C	413		CEJA101M16
C	414		CKSQYB223K50
C	418		CKSQYB105K16
C	419		CKSQYB105K16
C	424		CCSRCH101J50
C	480		CCSRCH101J50
C	481		CKSRYB102K50
C	482		CEJA100M16
C	600		CKSRYB103K50
C	601		CKSRYB102K50
C	603		CKSRYB102K50
C	604		CCSRCH102J50
C	605		CCSRCH101J50
C	606		CKSQYB104K50

=====Circuit Symbol & No.===Part Name			Part No.
C	607		CKSRYB104K16
C	608		CCSRCH270J50
C	609		CCSRCH270J50
C	611		CCSRCH101J50
C	612		CCSRCH101J50
C	650		CEJA2R2M50
C	660		CCSRCH220J50
C	661		CCSRCH220J50
C	662		CCSRCH220J50
C	663		CCSRCH220J50
C	664		CCSRCH220J50
C	665	0.1F/5.5V	CCL1023
C	666		CKSQYB104K50
C	667		CEJA470M16
C	668		CKSQYB105K16
C	669		CCSRCH220J50
C	670		CCSRCH220J50
C	671		CCSRCH220J50
C	672		CCSRCH220J50
C	673		CCSRCH220J50
C	674		CCSRCH220J50
C	682		CEJANP1R0M50
C	685		CEJANP1R0M50
C	686		CKSQYB104K50
C	687		CKSQYB104K50
C	688		CKSQYB103K50
C	689		CKSQYB105K16
C	730		CKSRYB472K50
C	800		CKSYB225K16
C	801		CKSYB225K16
C	802	330µF/10V	CCH1181
C	803		CKSRYB103K50
C	804	330µF/10V	CCH1181
C	805		CKSRYB103K50
C	806		CKSQYB104K50
C	807		CEJA101M16
C	808		CKSQYB104K50
C	809	330µF/10V	CCH1181
C	810		CKSYB225K16
C	811	1000µF/16V	CCH1003
C	812		CEJA101M10
C	813	330µF/10V	CCH1181
C	814		CKSQYB103K50
C	815		CKSQYB103K50
C	816		CEJA100M16
C	817		CEJA220M10
C	818		CEJA101M16
C	819		CKSQYB103K50
C	820		CEJA470M10
C	821		CEJA101M16
C	822		CKSQYB472K50
C	823		CKSQYB103K50
C	824		CKSQYB103K50
C	825		CEJA101M16
C	826	2200µF/16V	CCH1186
C	827	1000µF/16V	CCH1003
C	829		CEJA101M16
C	830		CKSQYB103K50
C	831		CKSQYB472K50
C	833		CKSQYB472K50
C	834		CCSRCH101J50
C	860		CKSQYB103K50
C	861		CEJA100M16
C	862		CKSQYB103K50
C	902		CEJA100M16

=====Circuit Symbol & No.===Part Name			Part No.
C	903		CEJA100M16
C	904		CKSYB475K16
C	905		CKSYB475K16
C	906	10.0µF/16V	CCG1143
C	907	10.0µF/16V	CCG1143
C	908		CKSYB104K50
C	909		CEJA330M16
C	910		CEAT682M16
C	911		CEJA330M16
C	912		CKSQYB473K50
C	913		CKSYB104K50
C	914	3300µF/16V	CCH1344
C	916		CEJA4R7M35
C	917		CEJA4R7M35
C	919		CKSYB105K16
C	920		CEJA4R7M35
C	921		CEJA4R7M35
C	922		CEJA4R7M35
C	923		CEJA4R7M35
C	925		CKSYB225K16
C	926		CKSYB225K16
C	927		CKSYB225K16
C	928		CKSYB225K16
C	929		CKSYB225K16
C	930		CKSYB225K16
C	931		CKSYB225K16
C	932		CKSYB225K16
C	933		CEJA4R7M35
C	934		CEJA4R7M35
C	935		CKSQYB224K16
C	936		CCSRCH560J50
C	937		CKSYB225K16
C	938		CKSYB225K16
C	939		CKSQYB224K16
C	940		CKSYB225K16
C	941		CKSYB225K16
C	942		CCSRCH560J50
C	943		CEJA100M16
C	944		CEJA100M16
C	945		CEJA100M16
C	946		CEJA100M16
C	947		CEJA100M16
C	948		CEJA100M16
C	949		CEJA100M16
C	950		CKSQYB102K50
C	951		CKSQYB102K50
C	952		CKSQYB102K50
C	953		CKSQYB102K50
C	954		CKSQYB102K50
C	955		CKSQYB102K50
C	978		CKSRYB103K50
C	979		CKSRYB104K16

C Unit Number : CWM7146
Unit Name : GDC Unit

MISCELLANEOUS

IC	1601	IC	PD3415A
IC	1602	IC	TC7SH04FU
IC	1651	IC	PD8064A
IC	1652	IC	PD8065A
IC	1701	IC	HD64412FI
IC	1751	IC	MSM5118165D-60TS
IC	1752	IC	MSM5118165D-60TS
IC	1823	IC	TC7WH125FU
IC	1831	IC	BA7046F
IC	1841	IC	TC74VHC123AFT

=====Circuit Symbol & No.		===Part Name	Part No.
IC	1891	IC	NJM78L03UA
IC	1892	IC	TLC2932
IC	1893	IC	TC7SET04FU
IC	1894	IC	TC74VHC4040FT
IC	1895	IC	TC3W03FU
D	1841	Diode	MA110
D	1842	Diode	MA110
L	1601	Inductor-Array	CTF1421
L	1602	Inductor-Array	CTF1421
L	1603	Inductor-Array	CTF1421
L	1604	Inductor-Array	CTF1421
L	1605	Inductor-Array	CTF1421
L	1606	Inductor	CTF1410
L	1607	Inductor-Array	CTF1421
L	1608	Inductor-Array	CTF1421
L	1609	Inductor-Array	CTF1421
L	1610	Inductor	CTF1410
L	1611	Inductor-Array	CTF1421
L	1612	Inductor	CTF1410
L	1613	Inductor	CTF1399
L	1614	Inductor	CTF1410
L	1615	Inductor-Array	CTF1421
L	1616	Inductor-Array	CTF1421
L	1617	Inductor	CTF1410
L	1618	Inductor	CTF1410
L	1619	Inductor	CTF1410
L	1620	Inductor	CTF1410
L	1621	Inductor	CTF1410
L	1623	Inductor-Array	CTF1421
L	1624	Inductor-Array	CTF1421
L	1625	Inductor-Array	CTF1421
L	1627	Inductor	CTF1399
L	1701	Inductor-Array	CTF1421
L	1702	Inductor-Array	CTF1421
L	1703	Inductor-Array	CTF1421
L	1704	Inductor-Array	CTF1421
L	1705	Inductor-Array	CTF1421
L	1709	Inductor	CTF1410
L	1710	Inductor-Array	CTF1421
L	1711	Inductor-Array	CTF1421
L	1712	Inductor-Array	CTF1421
L	1713	Inductor-Array	CTF1421
L	1714	Inductor-Array	CTF1421
L	1715	Inductor-Array	CTF1421
L	1716	Inductor-Array	CTF1421
L	1717	Inductor-Array	CTF1421
L	1718	Inductor-Array	CTF1421
L	1719	Inductor-Array	CTF1421
L	1720	Inductor	CTF1410
L	1721	Inductor-Array	CTF1421
L	1722	Inductor-Array	CTF1421
L	1723	Inductor-Array	CTF1421
L	1724	Inductor-Array	CTF1421
L	1725	Inductor-Array	CTF1421
L	1726	Inductor-Array	CTF1421
L	1727	Inductor-Array	CTF1421
L	1728	Inductor-Array	CTF1421
L	1729	Inductor	CTF1410
L	1730	Inductor-Array	CTF1421
L	1731	Inductor-Array	CTF1421
L	1732	Inductor-Array	CTF1421
L	1733	Inductor	CTF1306
L	1823	Inductor	CTF1399
L	1831	Inductor	CTF1399
L	1841	Inductor	CTF1399

=====Circuit Symbol & No.		===Part Name	Part No.
L	1892	Inductor	CTF1399
L	1893	Inductor	CTF1399
L	1894	Inductor	CTF1399
L	1895	Inductor	CTF1399
L	1896	Inductor	CTF1399
X	1601	Radiator 20MHz	CSS1520
X	1701	Radiator 8.25MHz	CWX2475
X	1702	Radiator 7.977138MHz	CWX2474
EF	1601	EMI Filter	CCG1142
EF	1651	EMI Filter	CCG1142
EF	1652	EMI Filter	CCG1142
EF	1701	EMI Filter	CCG1142
EF	1702	EMI Filter	CCG1142
EF	1703	EMI Filter	CCG1142
EF	1751	EMI Filter	CCG1142
EF	1752	EMI Filter	CCG1142

RESISTORS

R	1601		RS1/16S473J
R	1603		RS1/16S102J
R	1604		RS1/16S102J
R	1605		RS1/16S102J
R	1606		RA3C102J
R	1609		RS1/16S102J
R	1611		RS1/16S473J
R	1612		RS1/16S473J
R	1613		RS1/16S105J
R	1614		RS1/16S471J
R	1615		RS1/16S102J
R	1616		RAB4C102J
R	1617		RS1/16S102J
R	1618		RA3C102J
R	1621		RS1/16S0R0J
R	1622		RS1/16S0R0J
R	1623		RS1/16S0R0J
R	1624		RS1/16S0R0J
R	1631		RS1/16S0R0J
R	1651		RAB4C0R0J
R	1652		RAB4C0R0J
R	1653		RAB4C0R0J
R	1654		RAB4C0R0J
R	1655		RAB4C0R0J
R	1656		RAB4C0R0J
R	1657		RAB4C0R0J
R	1658		RAB4C0R0J
R	1659		RAB4C0R0J
R	1660		RAB4C0R0J
R	1661		RAB4C0R0J
R	1662		RAB4C0R0J
R	1663		RAB4C0R0J
R	1664		RAB4C0R0J
R	1665		RAB4C0R0J
R	1666		RAB4C0R0J
R	1667		RAB4C0R0J
R	1668		RAB4C0R0J
R	1669		RAB4C0R0J
R	1670		RAB4C0R0J
R	1702		RS1/16S0R0J
R	1703		RS1/16S473J
R	1706		RS1/16S0R0J
R	1707		RS1/16S220J
R	1708		RS1/16S220J
R	1709		RAB4C220J
R	1710		RAB4C220J
R	1711		RAB4C220J
R	1712		RAB4C220J
R	1713		RAB4C220J
R	1714		RS1/16S220J

=====Circuit Symbol & No.===Part Name		Part No.
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R	1715	RS1/16S302J
R	1716	RS1/16S220J
R	1717	RS1/16S220J
R	1718	RAB4C220J
R	1719	RAB4C220J
R	1720	RAB4C220J
R	1721	RAB4C220J
R	1722	RAB4C220J
R	1723	RS1/16S473J
R	1725	RS1/16S220J
R	1726	RS1/16S473J
R	1727	RS1/16S473J
R	1751	RAB4C0R0J
R	1752	RAB4C0R0J
R	1753	RS1/16S0R0J
R	1754	RS1/16S0R0J
R	1755	RAB4C0R0J
R	1756	RAB4C0R0J
R	1757	RAB4C0R0J
R	1758	RAB4C0R0J
R	1759	RS1/16S0R0J
R	1760	RAB4C0R0J
R	1761	RAB4C0R0J
R	1762	RAB4C0R0J
R	1763	RS1/16S0R0J
R	1764	RS1/16S0R0J
R	1765	RAB4C0R0J
R	1766	RAB4C0R0J
R	1767	RAB4C0R0J
R	1768	RAB4C0R0J
R	1769	RS1/16S0R0J
R	1770	RAB4C0R0J
R	1781	RS1/16S332J
R	1782	RS1/16S332J
R	1783	RS1/16S332J
R	1784	RS1/16S332J
R	1785	RS1/16S332J
R	1786	RS1/16S332J
R	1787	RS1/16S103J
R	1788	RS1/16S103J
R	1789	RS1/16S103J
R	1790	RAB4C103J
R	1791	RAB4C103J
R	1792	RAB4C103J
R	1793	RAB4C203J
R	1794	RAB4C203J
R	1795	RAB4C203J
R	1796	RAB4C203J
R	1797	RAB4C203J
R	1798	RAB4C203J
R	1801	RS1/16S153J
R	1802	RS1/16S102J
R	1831	RS1/16S134J
R	1832	RS1/16S102J
R	1833	RS1/16S102J
R	1834	RS1/16S474J
R	1835	RS1/16S103J
R	1836	RS1/16S474J
R	1837	RS1/16S331J
R	1838	RS1/16S103J
R	1841	RS1/16S103J
R	1842	RS1/16S681J
R	1845	RS1/16S681J
R	1846	RS1/16S0R0J
R	1848	RS1/16S681J
R	1849	RS1/16S0R0J
R	1851	RS1/16S103J
R	1852	RS1/16S681J
R	1860	RS1/16S0R0J
R	1861	RS1/16S0R0J
R	1891	RS1/16S332J
R	1892	RS1/16S301J
R	1893	RS1/16S331J
R	1894	RS1/16S101J
R	1895	RS1/16S102J
R	1896	RS1/16S102J
R	1897	RS1/16S222J
R	1898	RS1/16S102J
R	1899	RS1/16S102J
R	1900	RS1/16S222J
R	1901	RS1/16S101J

CAPACITORS

C	1601	CKSRYB104K16
C	1602	CKSRYB104K16
C	1603	CKSRYB104K16
C	1604	CKSRYB104K16
C	1605	CKSRYB104K16
C	1606	CKSRYB104K16
C	1607	CKSRYB104K16
C	1608	CCSRCH150J50
C	1609	CCSRCH150J50
C	1610	CEV101M16
C	1611	CKSRYB102K50
C	1612	CKSYB104K16
C	1613	CKSRYB104K16
C	1631	CCSRCH101J50
C	1651	CEV101M16
C	1652	CKSYB104K16
C	1653	CEV101M16
C	1654	CKSYB104K16
C	1701	CKSRYB104K16
C	1702	CKSYB104K16
C	1703	CCSRCH471J50
C	1704	CEV100M16
C	1705	CKSYB104K16
C	1706	CKSRYB104K16
C	1707	CEV101M16
C	1708	CKSRYB104K16
C	1709	CKSRYB104K16
C	1710	CKSRYB104K16
C	1711	CKSRYB104K16
C	1712	CKSRYB104K16
C	1713	CKSRYB104K16
C	1714	CKSYB104K16
C	1715	CEV100M16
C	1716	CKSRYB104K16
C	1717	CKSRYB104K16
C	1718	CKSRYB104K16
C	1719	CCSRCH101J50
C	1751	CKSYB104K16
C	1752	CEV101M16
C	1753	CKSYB104K16
C	1754	CEV101M16
C	1781	CCSRCH220J50
C	1782	CCSRCH220J50
C	1783	CCSRCH220J50
C	1825	CKSRYB104K16
C	1831	CCSRCH101J50
C	1832	CKSRYB222K50
C	1833	CKSRYB105K6R3
C	1834	CKSRYB105K6R3
C	1835	CKSRYB102K50

=====Circuit Symbol & No.		===Part Name	Part No.
C	1836		CKSRYB222K50
C	1837		CEV470M6R3
C	1841		CKSRYB183K25
C	1842		CCSRCH100D50
C	1843		CCSRCH100D50
C	1844		CCSRCH100D50
C	1845		CCSRCH471J50
C	1847		CKSRYB104K16
C	1848		CKSRYB102K50
C	1891		CEV220M6R3
C	1892		CKSRYB104K16
C	1893		CKSRYB104K16
C	1894		CKSRYB105K6R3
C	1895		CKSRYB103K25
C	1897		CKSRYB104K16
C	1898		CKSRYB104K16
C	1899		CKSRYB104K16
C	1900		CEV1R0M50

D Unit Number : CWM7147
Unit Name : DSP Unit

MISCELLANEOUS

=====Circuit Symbol & No.		===Part Name	Part No.
IC	2101	IC	CS4226-BQ
IC	2102	IC	BA3131FS
IC	2103	IC	TC7S08FU
IC	2201	IC	YSS912C-F
IC	2202	IC	TC55V8128BFTI-12
IC	2301	IC	PD5572A
IC	2302	IC	S-80734ANDYI
IC	2401	IC	TC9164AF
IC	2402	IC	NJM4558MD
IC	2403	IC	NJM4558MD
IC	2405	IC	NJM4558MD
IC	2406	IC	NJM4558MD
IC	2407	IC	NJM4558MD
IC	2408	IC	NJM4558MD
IC	2501	IC	PML003AM
IC	2502	IC	PML003AM
IC	2503	IC	PML003AM
IC	2602	IC	NJU7032M
IC	2603	IC	NJU7032M
IC	2604	IC	NJU7032M
IC	2901	IC	BA033FP
Q	2401	Transistor	2SC2412K
Q	2402	Transistor	2SC2412K
Q	2403	Transistor	2SC2412K
D	2301	Diode	MA111
D	2302	Diode	MA152WK
D	2401	Diode	MA3051(M)
L	2103	Inductor	CTF1410
L	2104	Inductor	CTF1410
L	2105	Inductor	CTF1410
L	2106	Inductor	CTF1410
L	2107	Inductor	CTF1410
L	2108	Inductor	CTF1410
L	2109	Inductor	CTF1399
L	2110	Inductor	CTF1410
L	2301	Inductor	CTF1399
L	2401	Inductor	CTF1410
L	2402	Inductor	CTF1410
L	2403	Inductor	CTF1410
L	2405	Inductor	CTF1410
L	2406	Inductor	CTF1410
L	2407	Inductor	CTF1410
L	2408	Inductor	CTF1410
L	2501	Inductor	CTF1399
L	2502	Inductor	CTF1399
L	2503	Inductor	CTF1399
L	2602	Inductor	CTF1399
L	2603	Inductor	CTF1399
L	2604	Inductor	CTF1399
L	2701	Inductor	CTF1410
L	2702	Inductor	CTF1410
L	2703	Inductor	CTF1410
L	2704	Inductor	CTF1410
L	2705	Inductor	CTF1410
L	2706	Inductor	CTF1410
X	2101	Radiator 12.288MHz	CSS1519
X	2201	Radiator 12.288MHz	CSS1519
X	2301	Radiator 10.00MHz	CSS1428
EF	2101	EMI Filter	CCG1142
EF	2102	EMI Filter	CCG1142
EF	2201	EMI Filter	CCG1142
EF	2202	EMI Filter	CCG1142
EF	2203	EMI Filter	CCG1142
EF	2204	EMI Filter	CCG1142
EF	2205	EMI Filter	CCG1142
EF	2206	EMI Filter	CCG1142
EF	2207	EMI Filter	CCG1142
EF	2208	EMI Filter	CCG1142
EF	2209	EMI Filter	CCG1142
EF	2210	EMI Filter	CCG1142
EF	2301	EMI Filter	CCG1142
EF	2302	EMI Filter	CCG1142
EF	2701	EMI Filter	CCG1142
EF	2702	EMI Filter	CCG1142
EF	2703	EMI Filter	CCG1142
EF	2704	EMI Filter	CCG1142

RESISTORS

=====Circuit Symbol & No.		===Part Name	Part No.
R	2101		RS1/16S101J
R	2102		RS1/16S101J
R	2103		RS1/10S2R0J
R	2104		RS1/16S471J
R	2105		RAB4C101J
R	2106		RAB4C223J
R	2107		RS1/16S470J
R	2108		RS1/16S332J
R	2109		RS1/16S0R0J
R	2110		RS1/16S0R0J
R	2111		RS1/16S470J
R	2112		RS1/16S470J
R	2113		RS1/16S101J
R	2114		RS1/16S622J
R	2115		RS1/16S622J
R	2116		RS1/16S102J
R	2117		RS1/16S102J
R	2118		RS1/16S104J
R	2119		RS1/16S104J
R	2120		RS1/16S104J
R	2121		RS1/16S104J
R	2122		RS1/16S100J
R	2123		RS1/16S105J
R	2124		RA3C101J
R	2125		RS1/16S102J
R	2126		RS1/16S681J
R	2127		RS1/16S102J
R	2128		RS1/16S102J
R	2129		RS1/16S102J
R	2130		RS1/16S101J
R	2131		RS1/16S101J
R	2132		RS1/16S473J
R	2201		RAB4C101J
R	2202		RAB4C102J
R	2203		RS1/16S473J

=====Circuit Symbol & No.===Part Name			Part No.
R	2204		RAB4C102J
R	2205		RAB4C471J
R	2206		RAB4C471J
R	2207		RS1/16S471J
R	2208		RS1/16S105J
R	2209		RS1/16S473J
R	2210		RS1/16S102J
R	2211		RAB4C102J
R	2212		RS1/16S102J
R	2213		RS1/16S102J
R	2214		RS1/16S102J
R	2215		RS1/16S103J
R	2216		RAB4C102J
R	2217		RAB4C102J
R	2218		RS1/16S102J
R	2219		RAB4C101J
R	2220		RAB4C102J
R	2221		RAB4C471J
R	2222		RAB4C471J
R	2301		RS1/16S473J
R	2302		RS1/16S473J
R	2303		RS1/16S473J
R	2304		RAB4C102J
R	2305		RS1/16S102J
R	2306		RS1/16S102J
R	2307		RS1/16S105J
R	2308		RAB4C102J
R	2309		RS1/16S102J
R	2310		RS1/16S473J
R	2311		RAB4C102J
R	2312		RAB4C681J
R	2313		RS1/16S681J
R	2314		RA3C102J
R	2316		RS1/16S473J
R	2317		RS1/16S102J
R	2318		RS1/16S471J
R	2319		RAB4C102J
R	2320		RS1/16S124J
R	2321		RS1/16S102J
R	2322		RAB4C102J
R	2324		RS1/16S123J
R	2326		RS1/16S0R0J
R	2401		RS1/16S622J
R	2403		RS1/16S622J
R	2405		RS1/16S752J
R	2406		RS1/16S752J
R	2407		RS1/16S363J
R	2408		RS1/16S223J
R	2409		RS1/16S153J
R	2410		RS1/16S133J
R	2411		RS1/16S113J
R	2412		RS1/16S363J
R	2413		RS1/16S223J
R	2414		RS1/16S153J
R	2415		RS1/16S133J
R	2416		RS1/16S113J
R	2419		RS1/16S752J
R	2421		RS1/16S752J
R	2425		RS1/16S0R0J
R	2426		RS1/16S0R0J
R	2427		RS1/16S133J
R	2428		RS1/16S133J
R	2429		RS1/16S101J
R	2430		RS1/16S101J
R	2431		RS1/16S104J

=====Circuit Symbol & No.===Part Name			Part No.
R	2432		RS1/16S104J
R	2433		RS1/16S622J
R	2435		RS1/16S622J
R	2437		RS1/16S162J
R	2438		RS1/16S122J
R	2439		RS1/16S752J
R	2440		RS1/16S752J
R	2441		RS1/16S363J
R	2442		RS1/16S153J
R	2443		RS1/16S113J
R	2444		RS1/16S363J
R	2445		RS1/16S153J
R	2446		RS1/16S113J
R	2449		RS1/16S752J
R	2451		RS1/16S752J
R	2455		RS1/16S0R0J
R	2456		RS1/16S0R0J
R	2457		RS1/16S133J
R	2458		RS1/16S133J
R	2459		RS1/16S101J
R	2460		RS1/16S101J
R	2461		RS1/16S104J
R	2462		RS1/16S104J
R	2463		RS1/16S622J
R	2465		RS1/16S432J
R	2467		RS1/16S363J
R	2472		RS1/16S752J
R	2473		RS1/16S512J
R	2474		RS1/16S473J
R	2481		RS1/16S133J
R	2484		RS1/16S752J
R	2486		RS1/16S512J
R	2488		RS1/16S473J
R	2489		RS1/16S104J
R	2490		RS1/16S102J
R	2491		RS1/16S102J
R	2492		RS1/16S102J
R	2493		RS1/16S102J
R	2494		RS1/16S102J
R	2495		RS1/16S102J
R	2497		RS1/16S122J
R	2498		RS1/16S122J
R	2501		RA3C101J
R	2502		RA3C101J
R	2503		RA3C101J
R	2505		RS1/16S104J
R	2506		RS1/16S104J
R	2507		RS1/16S104J
R	2508		RS1/16S104J
R	2510		RS1/16S104J
R	2601		RS1/16S273J
R	2602		RS1/16S103J
R	2603		RS1/16S273J
R	2604		RS1/16S103J
R	2605		RS1/16S273J
R	2606		RS1/16S103J
R	2607		RS1/16S0R0J
R	2608		RS1/16S103J
R	2609		RS1/16S0R0J
R	2610		RS1/16S103J
R	2611		RS1/16S0R0J
R	2612		RS1/16S103J
R	2613		RS1/16S104J
R	2614		RS1/16S104J
R	2615		RS1/16S104J

=====Circuit Symbol & No.===Part Name			Part No.
R	2618		RS1/16S104J
R	2619		RS1/16S104J
R	2620		RS1/16S104J
R	2621		RS1/16S103J
R	2622		RS1/16S103J
R	2623		RS1/16S103J
R	2624		RS1/16S0R0J
R	2625		RS1/16S0R0J
R	2626		RS1/16S0R0J
R	2627		RS1/16S273J
R	2628		RS1/16S103J
R	2629		RS1/16S273J
R	2630		RS1/16S103J
R	2631		RS1/16S753J
R	2632		RS1/16S103J
R	2633		RS1/16S102J
R	2634		RS1/16S102J
R	2641		RS1/16S100J
R	2642		RS1/16S100J

CAPACITORS

=====Circuit Symbol & No.===Part Name			Part No.
C	2101		CEV101M16
C	2102		CKSRYB104K16
C	2103		CEV4R7M25
C	2104		CEV100M16
C	2105		CEV4R7M25
C	2106		CEV100M16
C	2107		CEV101M16
C	2108		CCSRCH101J50
C	2109		CKSRYB105K6R3
C	2110	0.018μF/16V	CCE1028
C	2111		CCSRCH151J50
C	2112		CCSRCH151J50
C	2113	0.18μF/16V	CCE1029
C	2114		CKSRYB104K16
C	2115		CCSRCH151J50
C	2116		CCSRCH151J50
C	2117		CEV100M16
C	2118		CCSRCH101J50
C	2119		CCSRCH101J50
C	2120		CCSRCH270J50
C	2121		CCSRCH220J50
C	2122		CSZS220M6R3
C	2123		CSZS220M6R3
C	2124		CSZS220M6R3
C	2125		CSZS220M6R3
C	2126		CSZS220M6R3
C	2127		CSZS220M6R3
C	2201		CKSYB106K6R3
C	2202		CKSYB106K6R3
C	2203		CKSYB106K6R3
C	2204		CKSYB106K6R3
C	2205		CCSRCH270J50
C	2206		CCSRCH220J50
C	2207		CKSYB106K6R3
C	2208		CCSRCH471J50
C	2209		CKSYB106K6R3
C	2210		CKSYB106K6R3
C	2211		CKSYB106K6R3
C	2212		CKSYB106K6R3
C	2213		CKSYB106K6R3
C	2301		CKSYB106K6R3
C	2302		CCSRCH220J50
C	2303		CCSRCH220J50
C	2304		CCSRCH220J50
C	2305		CCSRCH220J50
C	2306		CCSRCH220J50
C	2307		CKSYB106K6R3
C	2308		CKSYB225K16
C	2401		CKSRYB122K50
C	2402		CKSRYB122K50
C	2403		CKSYB106K6R3
C	2408		CCSRCH221J50
C	2409		CCSRCH221J50
C	2410		CKSYB106K6R3
C	2411		CKSYB106K6R3
C	2412		CKSYB475K10
C	2413		CKSYB475K10
C	2415		CKSYB106K6R3
C	2416		CKSRYB122K50
C	2417		CKSRYB122K50
C	2423		CCSRCH221J50
C	2424		CCSRCH221J50
C	2425		CKSYB106K6R3
C	2426		CKSYB106K6R3
C	2427		CKSYB475K10
C	2428		CKSYB475K10
C	2429		CKSRYB122K50
C	2430		CKSRYB103K50
C	2444		CCSRCH221J50
C	2445		CCSRCH120J50
C	2446		CKSRYB153K25
C	2447		CKSYB106K6R3
C	2448		CKSYB475K10
C	2449		CKSYB475K10
C	2452		CKSRYB222K50
C	2454		CKSRYB222K50
C	2455		CKSRYB222K50
C	2456		CKSRYB222K50
C	2457		CKSRYB222K50
C	2458		CKSRYB104K16
C	2460		CCSRCH560J50
C	2461		CCSRCH560J50
C	2462		CCSRCH560J50
C	2463		CCSRCH560J50
C	2464		CCSRCH120J50
C	2471		CKSYB106K6R3
C	2472		CKSYB106K6R3
C	2473		CKSYB106K6R3
C	2474		CKSYB106K6R3
C	2475		CKSYB106K6R3
C	2476		CKSYB106K6R3
C	2477		CKSYB106K6R3
C	2478		CKSYB106K6R3
C	2479		CKSYB106K6R3
C	2480		CKSYB106K6R3
C	2481		CKSYB106K6R3
C	2482		CKSYB106K6R3
C	2483		CKSYB106K6R3
C	2484		CKSYB106K6R3
C	2485		CKSYB106K6R3
C	2486		CKSYB106K6R3
C	2487		CKSYB106K6R3
C	2488		CKSYB106K6R3
C	2489		CKSYB106K6R3
C	2490		CKSYB106K6R3
C	2491		CKSYB106K6R3
C	2492		CKSYB106K6R3
C	2493		CKSYB106K6R3
C	2495		CKSYB106K6R3
C	2496		CKSYB106K6R3

=====Circuit Symbol & No.===Part Name			Part No.
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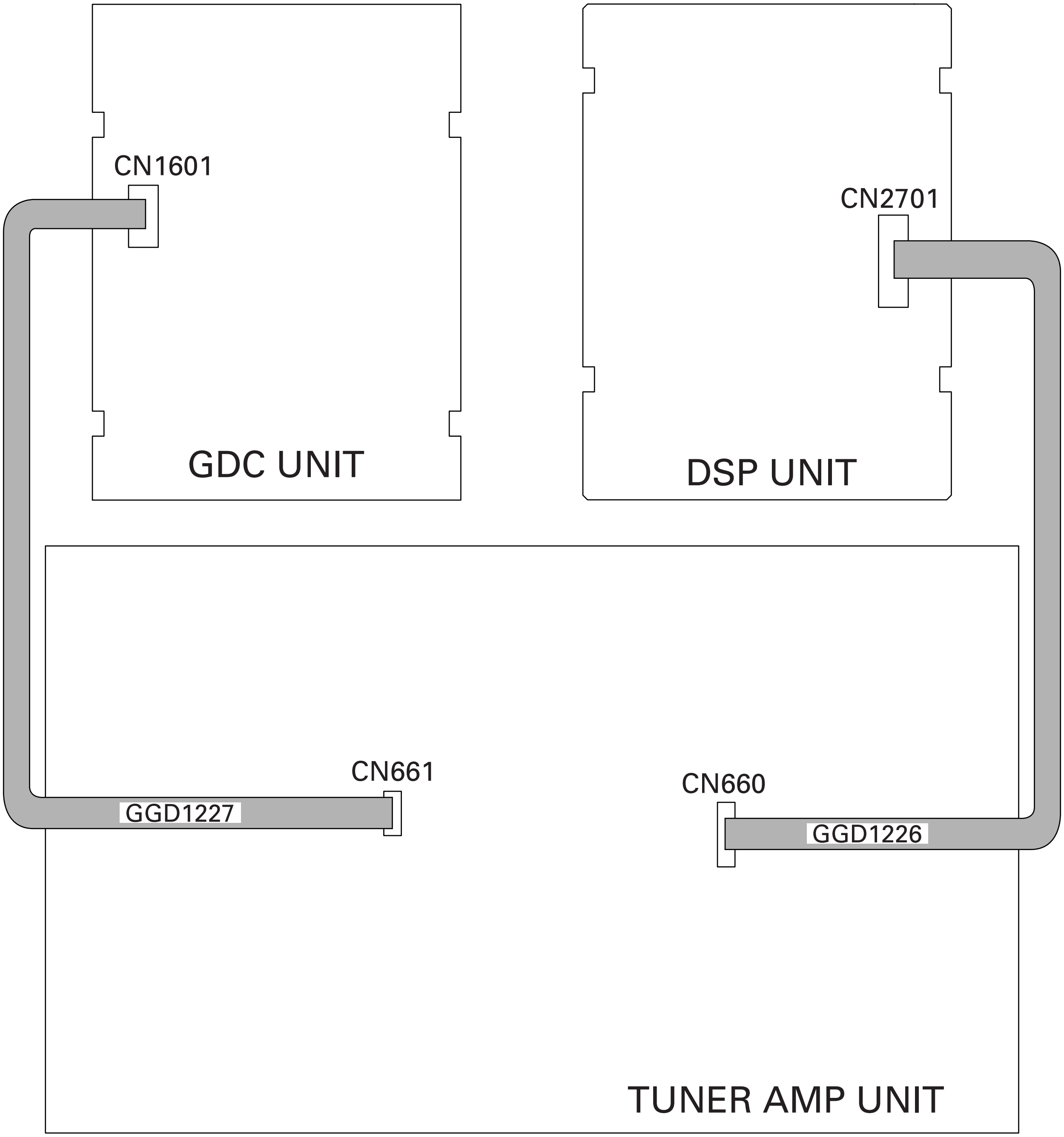
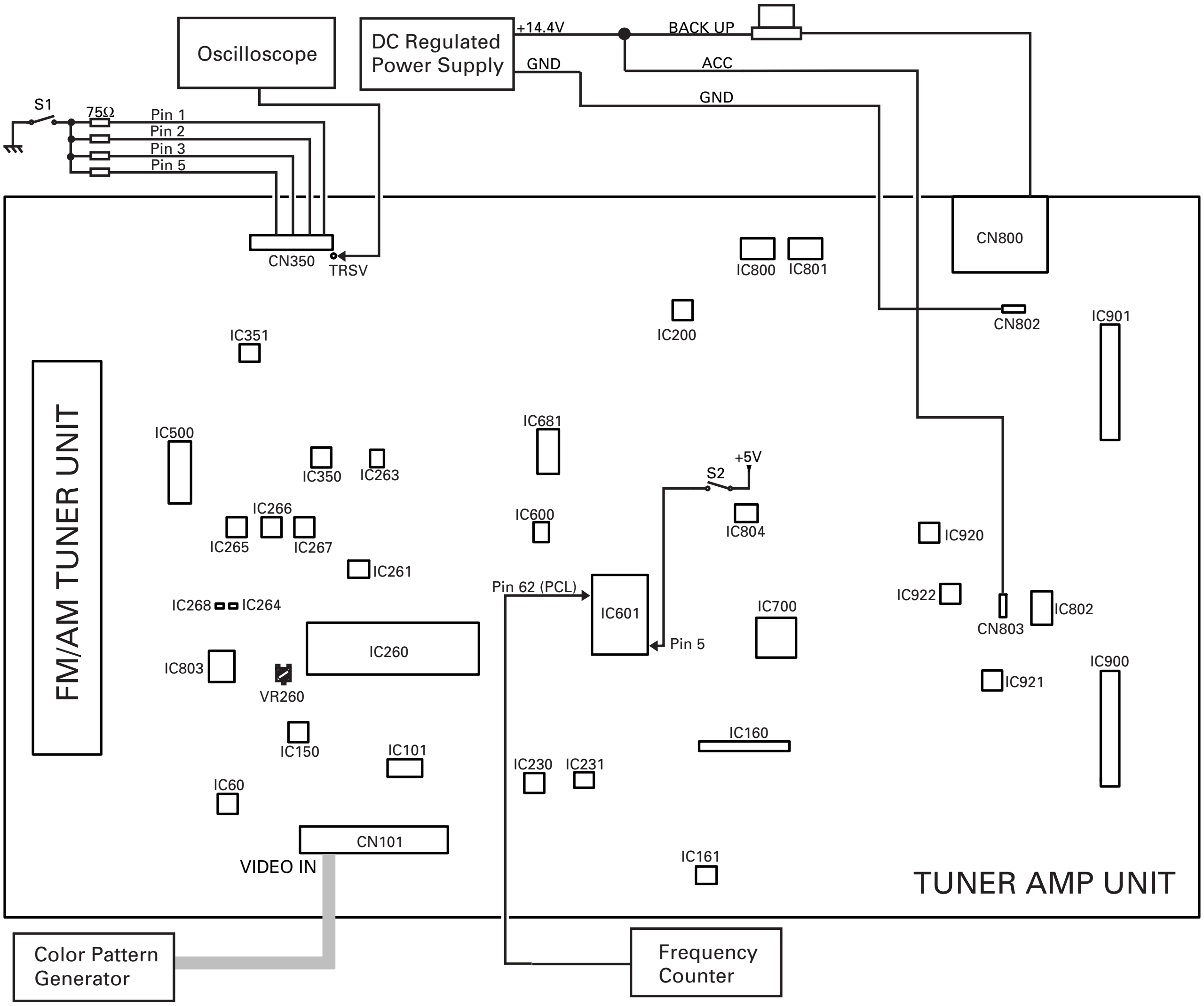
C	2497		CKSYB106K6R3
C	2498		CKSYB106K6R3
C	2501		CKSYB106K6R3
C	2502		CKSYB475K10
C	2503		CKSYB475K10
C	2504		CKSYB106K6R3
C	2505		CKSYB475K10
C	2506		CKSYB475K10
C	2507		CKSYB106K6R3
C	2508		CKSYB475K10
C	2509		CKSYB475K10
C	2510		CEV100M16
C	2511		CEV100M16
C	2512		CEV100M16
C	2513		CKSQYB103K25
C	2514		CEV470M10
C	2515		CKSQYB103K25
C	2516		CEV470M10
C	2517		CKSQYB103K25
C	2518		CEV470M10
C	2519		CKSYB475K10
C	2520		CKSYB475K10
C	2521		CKSYB475K10
C	2522		CKSYB475K10
C	2523		CKSYB475K10
C	2524		CKSYB475K10
C	2525		CKSYB106K6R3
C	2526		CKSYB106K6R3
C	2527		CKSYB106K6R3
C	2531		CKSRYB105K6R3
C	2532		CKSRYB105K6R3
C	2533		CKSRYB105K6R3
C	2534		CKSRYB105K6R3
C	2536		CKSRYB105K6R3
C	2601		CCSRCH270J50
C	2602		CCSRCH270J50
C	2603		CCSRCH270J50
C	2605		CKSYB475K10
C	2606		CKSYB475K10
C	2607		CKSYB475K10
C	2610		CCSRCH270J50
C	2611		CCSRCH270J50
C	2612		CKSRYB182K50
C	2613		CSZS220M6R3
C	2615		CSZS220M6R3
C	2901		CKSYB334K16
C	2902		CSZSR220M10
C	2903		CKSRYB103K50

6. ADJUSTMENT

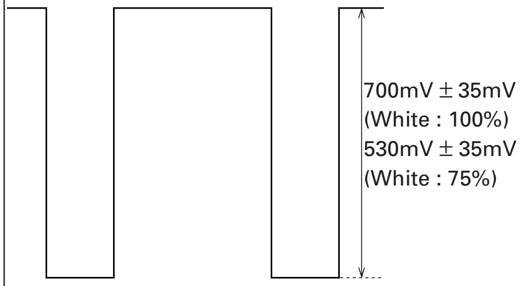
● **Connection Diagram (1)**


CN1601
CN2701
GDC UNIT
DSP UNIT
CN661
CN660
GGD1227
GGD1226
TUNER AMP UNIT

● Connection Diagram (2)


Oscilloscope
DC Regulated Power Supply
+14.4V
GND
BACK UP
ACC
GND
S1
75Ω
Pin 1
Pin 2
Pin 3
Pin 5
CN350
TRSV
IC800
IC801
CN800
CN802
IC901
IC200
IC351
FM/AM TUNER UNIT
IC500
IC681
IC350
IC263
+5V
S2
IC266
IC600
IC804
IC265
IC267
IC920
IC261
Pin 62 (PCL)
IC601
IC700
IC922
IC802
CN803
IC268
IC264
IC260
Pin 5
IC803
VR260
IC921
IC900
IC160
IC150
IC101
IC230
IC231
IC60
CN101
VIDEO IN
IC161
TUNER AMP UNIT
Color Pattern Generator
Frequency Counter

VIDEO ADJUSTMENT

Adjustment Method	Color Pattern Generator	Adjustment Point	Adjustment Method (Switch Position)
Bright Level	White 100% , or 75% Non Color Burst Signal	VR260	Oscilloscope : (S1 : ON)  700mV ± 35mV (White : 100%) 530mV ± 35mV (White : 75%)
Clock Check	•••••	•••••	Frequency Counter : 786,432Hz ± 40Hz (S2 : ON)

* The brightness of the screen changes if the adjustment shifts.

7. GENERAL INFORMATION

7.1 DISASSEMBLY

● Removing the Upper Case (not shown)

1. Remove the nine screws.
2. Remove the Upper Case.

● Removing the Tuner Amp Unit (Fig.1)

1 Remove the four screws.

2 Remove the two screws.

3 Remove the screw.

4 Straight the tabs at eight locations indicated.

5 Disconnect the connector and then remove the Tuner Amp Unit.

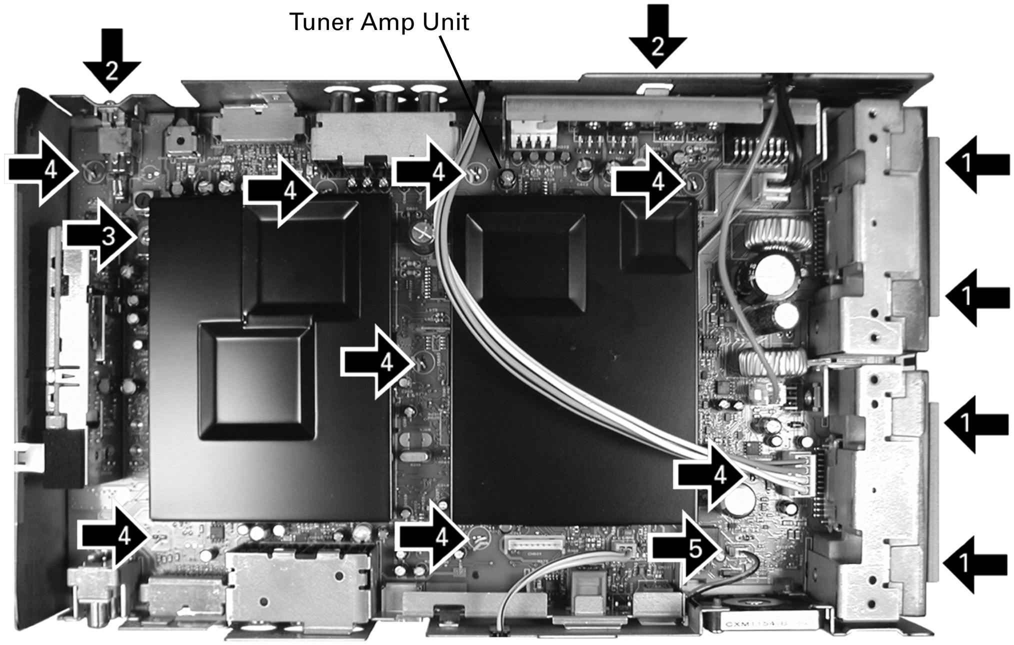
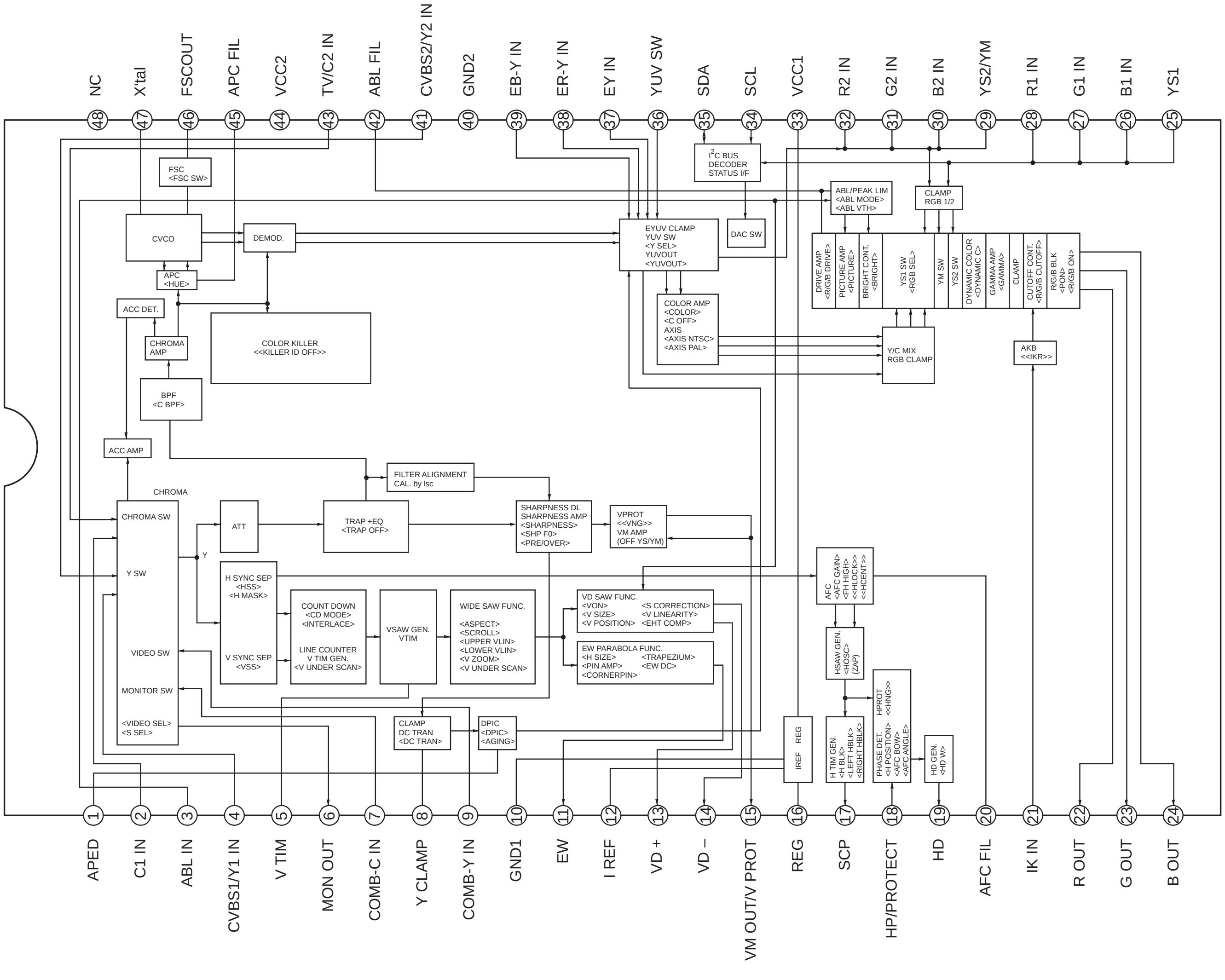


Fig.1

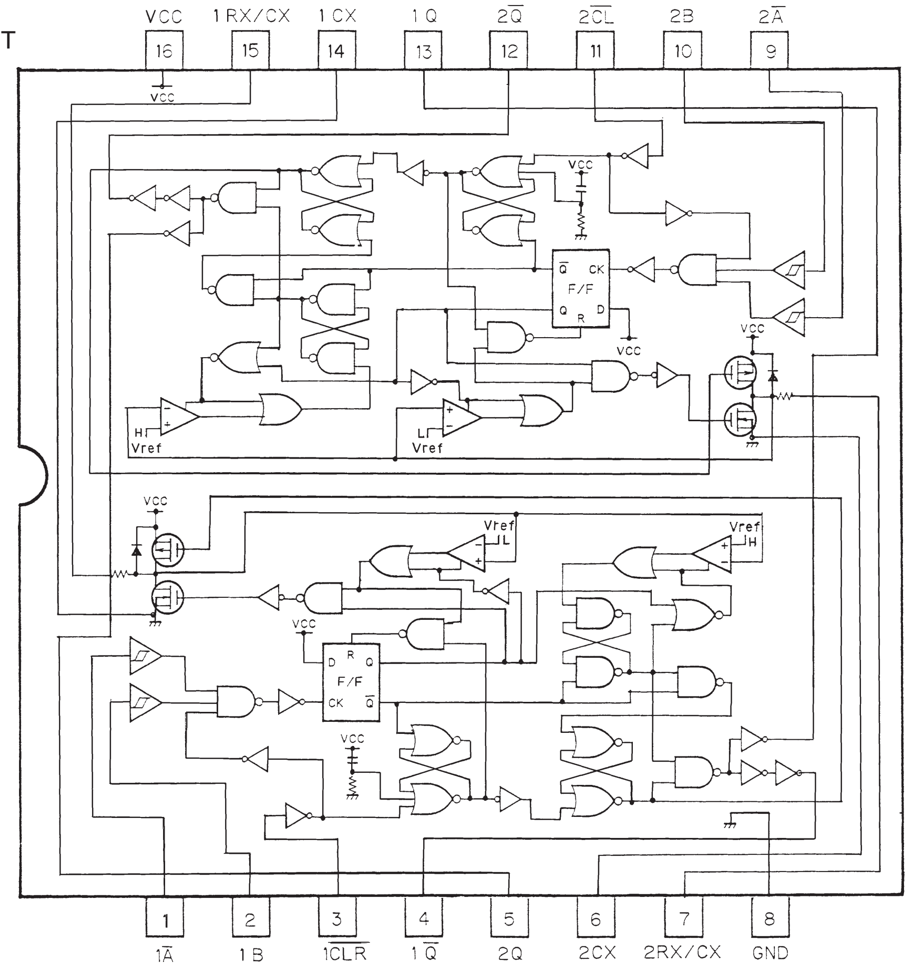
7.2 IC

CXA2061S
CXA2060BS
TC74VHC123AFT
BA05ST-V5
PE5154A
PE5152A
PE5153A
NJU7032M
PD3415A
PD8064A
PD8065A
HD64412FI
MSM5118165D-60TS
TC7WH125FU
BA7046F
TLC2932
TC7SET04FU
TC74VHC4040FT
TC3W03FU
CS4226-BQ
YSS912C-F
TC55V8128BFTI-12
PD5572A
TC9164AF
BA033FP

CXA2061S (AVM-P9000R/UC)
CXA2060BS (AVM-P9000R/EW, AVM-P9000/ES)

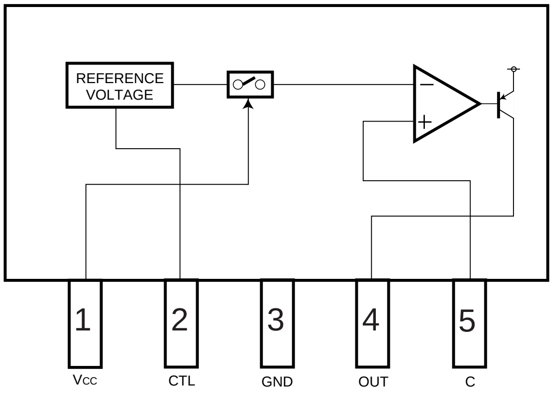

NC
X'tal
FSCOUT
APC FIL
VCC2
TV/C2 IN
ABL FIL
CVBS2/Y2 IN
GND2
EB-Y IN
ER-Y IN
EY IN
YUV SW
SDA
SCL
VCC1
R2 IN
G2 IN
B2 IN
YS2/YM
R1 IN
G1 IN
B1 IN
YS1
48
47
46
45
44
43
42
41
40
39
38
37
36
35
34
33
32
31
30
29
28
27
26
25
FSC
<FSC SW>
I^2C BUS
DECODER
STATUS I/F
ABL/PEAK LIM
<ABL MODE>
<ABL VTH>
CLAMP
RGB 1/2
CVCO
DEMOD.
EYUV CLAMP
YUV SW
<Y SEL>
YUVOUT
<YUVOUT>
DAC SW
DRIVE AMP
<R/G/B DRIVE>
PICTURE AMP
<PICTURE>
BRIGHT CONT.
<BRIGHT>
YS1 SW
<RGB SEL>
YM SW
YS2 SW
DYNAMIC COLOR
<DYNAMIC C>
GAMMA AMP
<GAMMA>
CLAMP
CUTOFF CONT.
<R/G/B CUTOFF>
R/G/B BLK
<PON>
<R/G/B ON>
APC
<HUE>
ACC DET.
CHROMA
AMP
COLOR KILLER
<<KILLER ID OFF>>
COLOR AMP
<COLOR>
<C OFF>
AXIS
<AXIS NTSC>
<AXIS PAL>
Y/C MIX
RGB CLAMP
AKB
<<IKR>>
BPF
<C BPF>
ACC AMP
FILTER ALIGNMENT
CAL. by Isc
CHROMA
CHROMA SW
ATT
TRAP +EQ
<TRAP OFF>
SHARPNESS DL
SHARPNESS AMP
<SHARPNESS>
<SHP F0>
<PRE/OVER>
VPROT
<<VNG>>
VM AMP
(OFF YS/YM)
Y
Y SW
H SYNC SEP
<HSS>
<H MASK>
AFC
<AFC GAIN>
<FH HIGH>
<<HLOCK>>
<<HCENT>>
COUNT DOWN
<CD MODE>
<INTERLACE>
LINE COUNTER
V TIM GEN.
<V UNDER SCAN>
VSAW GEN.
VTIM
WIDE SAW FUNC.
<ASPECT>
<SCROLL>
<UPPER VLIN>
<LOWER VLIN>
<V ZOOM>
<V UNDER SCAN>
VD SAW FUNC.
<VON>
<V SIZE>
<V POSITION>
<S CORRECTION>
<V LINEARITY>
<EHT COMP>
EW PARABOLA FUNC.
<H SIZE>
<PIN AMP>
<CORNERPIN>
<TRAPEZIUM>
<EW DC>
HSAW GEN.
<HOSC>
(ZAP)
VIDEO SW
V SYNC SEP
<VSS>
MONITOR SW
<VIDEO SEL>
<S SEL>
CLAMP
DC TRAN
<DC TRAN>
DPIC
<DPIC>
<AGING>
IREF
REG
H TIM GEN.
<H BLK>
<LEFT HBLK>
<RIGHT HBLK>
HPROT
<<HNG>>
PHASE DET.
<H POSITION>
<AFC BOW>
<AFC ANGLE>
HD GEN.
<HD W>
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
APED
C1 IN
ABL IN
CVBS1/Y1 IN
V TIM
MON OUT
COMB-C IN
Y CLAMP
COMB-Y IN
GND1
EW
I REF
VD +
VD –
VM OUT/V PROT
REG
SCP
HP/PROTECT
HD
AFC FIL
IK IN
R OUT
G OUT
B OUT

*TC74VHC123AFT


VCC
1RX/CX
1CX
1Q
2$\overline{Q}$
2$\overline{CL}$
2B
2$\overline{A}$
16
15
14
13
12
11
10
9
VCC
F/F
$\overline{Q}$
CK
Q
D
R
H
Vref
L
Vref
D
R
Q
CK
$\overline{Q}$
1
2
3
4
5
6
7
8
1$\overline{A}$
1B
1$\overline{CLR}$
1$\overline{Q}$
2Q
2CX
2RX/CX
GND

IC's marked by* are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

BA05ST-V5

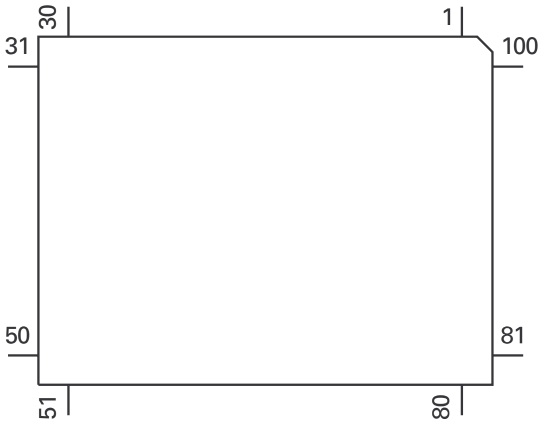

REFERENCE VOLTAGE
1
2
3
4
5
Vcc
CTL
GND
OUT
C

● Pin Functions (PE5154A, AVM-P9000R/UC)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	$\overline{\text{SWVDD}}$	O	C	Display microcomputer power supply output
2	$\overline{\text{DSENS}}$	I		Grille detach sense input
3	$\overline{\text{NAVSEN}}$	I		Navigation system connect sense input
4	NAVMIX	I		Navigation guide voice trigger input
5	TESTIN	I		Test program mode input
6	$\overline{\text{DRST}}$	O	C	RDS reset output
7	RECIVE	O	C	During RDS data reception output
8–10	NC			Not used
11	$\overline{\text{RESET}}$	I		Reset input
12	XT2			Not used
13	XT1			VSS
14	VSS			GND
15	X2			Crystal oscillator connection pin
16	X1			Crystal oscillator connection pin
17	REGOFF			VDD
18	REGC			VSS
19	VDD			Power supply
20	VPWR	O	C	Back light, screen system power ON output
21	SYSPW	O	C	System power supply control output
22	SHRST	O	C	SH reset output
23	MODELIN	I		Model select input
24	IPPW	O	C	IP-BUS driver power supply output
25	ASENBO	O	C	Slave power supply control output
26	NC			Not used
27	TELIN	I		Telephone mute input
28	MUTE	O	C	Mute output
29	AMUTE	O	C	All system mute output
30	PBSENS	I		Parking sense input
31	VCAMUTE	O	C	Monitor SP amp mute output
32	NC			Not used
33	VCK	O	C	Clock output for electronic volume
34	VST	O	C	Strobe pulse output for electronic volume
35	VDT	O	C	Data output for electronic volume
36	NC			Not used
37	ISENS	I		Illumination sense input
38	SD	I		SD input
39	$\overline{\text{ST}}$	I		Stereo input
40	VSS			GND
41	VDD			Power supply
42	SEL0	O	C	Selector information output 0 (00:NAVI / 01:TV)
43	SEL1	O	C	Selector information output 1 (10:VTR1 / 11:VTR2)
44	$\overline{\text{RDSLK}}$	I		RDS LK signal input
45	NC			Not used
46	RDT	I		RDS demodulation data input
47	FM/AM	O	C	RDS decoder power supply control output
48	LOCL	O	C	Local L output
49	LOCH	O	C	Local H output
50	TUNPCE2	O	C	EEPROM chip enable output
51	ROMDATA	O	C	ROM correction data output
52	ROMCLK	O	C	ROM correction clock output
53	ROMCS	O	C	ROM correction chip select output
54	FVMUTE	O	C	Front picture mute output
55	VSEL0	O	C	Picture select output 0 (0:NAVI / 1:COMP)
56	VSEL1	O	C	Picture select output 1 (0:The rest / 1:OSD)
57	RMSEL	O	C	Rear monitor select (0:DVD / 1:VTR)
58	RMSEL2	O	C	Rear monitor select 2 (0:RMSEL / 1:TV)
59	$\overline{\text{NAVION}}$	O	C	Guide voice control output (0:ON / 1:OFF)

Pin No.	Pin Name	I/O	Format	Function and Operation
60	RVMUTE	O	C	Rear picture mute output
61	RMMUTE	O	C	Rear monitor voice mute output
62	PCL	O	C	Clock adjustment output
63	$\overline{\text{BRXEN}}$	O	C	P-BUS communication enable output
64	$\overline{\text{BSRQ}}$	I		P-BUS communication request input
65	BCK	I/O		P-BUS clock input/output
66	BSI	I		P–BUS serial data input
67	BSO	O	C	P–BUS serial data output
68	$\overline{\text{BRST}}$	O	C	P-BUS reset output
69	SCL	O	C	I2C clock output
70	SDO	O	C	I2C data output
71	VOLPWM	O	C	Guide volume PWM output
72	NC			Not used
73	TEST			Test terminal
74	SL	I		Signal level input
75–77	NC			Not used
78	IDLE	I		IDLE input
79	MOVIE	I		Movie input
80	MEMHLD	O	C	Memory Keep output
81	$\overline{\text{ADPW}}$	O	C	A/D converter power supply output
82,83	VDD			Power supply
84	GND			GND
85	RX	I		IP-BUS data input
86	TX	O	C	IP-BUS data output
87,88	NC			Not used
89	$\overline{\text{RCK}}$	I		RDS clock input
90	NC			Not used
91	$\overline{\text{REMIN}}$	I		Remote control data input
92	$\overline{\text{ASENS}}$	I		ACC power sense input
93	$\overline{\text{BSENS}}$	I		Back up power sense input
94	TUNPDI	I		PLL IC data input
95	KEYDT	I		Display data input
96	DPDT	O	C	Display data output
97	TUNPCK	O	C	PLL IC clock output
98	TUNPDO	O	C	PLL IC data output
99	TUNPCE	O	C	PLL IC chip enable output
100	PEE	O	C	PEE sound output

*PE5154A



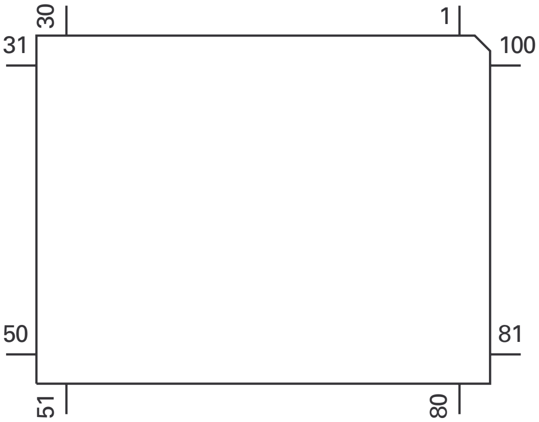
Format	Meaning
C	C MOS

● Pin Functions (PE5152A, AVM-P9000R/EW)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	$\overline{\text{SWVDD}}$	O	C	Display microcomputer power supply output
2	$\overline{\text{DSENS}}$	I		Grille detach sense input
3	$\overline{\text{NAVSEN}}$	I		Navigation system connect sense input
4	NAVMIX	I		Navigation guide voice trigger input
5	TESTIN	I		Test program mode input
6	$\overline{\text{DRST}}$	O	C	RDS reset output
7	RECIVE	O	C	During RDS data reception output
8–10	NC			Not used
11	$\overline{\text{RESET}}$	I		Reset input
12	XT2			Not used
13	XT1			VSS
14	VSS			GND
15	X2			Crystal oscillator connection pin
16	X1			Crystal oscillator connection pin
17	REGOFF			VDD
18	REGC			VSS
19	VDD			Power supply
20	VPWR	O	C	Back light, screen system power ON output
21	SYSPW	O	C	System power supply control output
22	SHRST	O	C	SH reset output
23	MODELIN	I		Model select input
24	IPPW	O	C	IP-BUS driver power supply output
25	ASENBO	O	C	Slave power supply control output
26	NC			Not used
27	TELIN	I		Telephone mute input
28	MUTE	O	C	Mute output
29	AMUTE	O	C	All system mute output
30	PBSENS	I		Parking sense input
31	VCAMUTE	O	C	Monitor SP amp mute output
32	NL2DT	I		RDS noise level input
33	VCK	O	C	Clock output for electronic volume
34	VST	O	C	Strobe pulse output for electronic volume
35	VDT	O	C	Data output for electronic volume
36	$\overline{\text{TMUTE}}$	O	C	Tuner mute output
37	ISENS	I		Illumination sense input
38	SD	I		SD input
39	$\overline{\text{ST}}$	I		Stereo input
40	VSS			GND
41	VDD			Power supply
42	SEL0	O	C	Selector information output 0 (00:NAVI / 01:TV)
43	SEL1	O	C	Selector information output 1 (10:VTR1 / 11:VTR2)
44	$\overline{\text{RDSLK}}$	I		RDS LK signal input
45	$\overline{\text{CURRQ}}$	O	C	Tuner voltage FIX output
46	RDT	I		RDS demodulation data input
47	FM/AM	O	C	RDS decoder power supply control output
48	LOCL	O	C	Local L output
49	LOCH	O	C	Local H output
50	TUNPCE2	O	C	EEPROM chip enable output
51	ROMDATA	O	C	ROM correction data output
52	ROMCLK	O	C	ROM correction clock output
53	ROMCS	O	C	ROM correction chip select output
54	FVMUTE	O	C	Front picture mute output
55	VSEL0	O	C	Picture select output 0 (0:NAVI / 1:COMP)
56	VSEL1	O	C	Picture select output 1 (0:The rest / 1:OSD)
57	RMSEL	O	C	Rear monitor select (0:DVD / 1:VTR)
58	RMSEL2	O	C	Rear monitor select 2 (0:RMSEL / 1:TV)
59	$\overline{\text{NAVION}}$	O	C	Guide voice control output (0:ON / 1:OFF)

Pin No.	Pin Name	I/O	Format	Function and Operation
60	RVMUTE	O	C	Rear picture mute output
61	RMMUTE	O	C	Rear monitor voice mute output
62	PCL	O	C	Clock adjustment output
63	$\overline{\text{BRXEN}}$	O	C	P-BUS communication enable output
64	$\overline{\text{BSRQ}}$	I		P-BUS communication request input
65	BCK	I/O		P-BUS clock input/output
66	BSI	I		P–BUS serial data input
67	BSO	O	C	P–BUS serial data output
68	$\overline{\text{BRST}}$	O	C	P-BUS reset output
69	SCL	O	C	I2C clock output
70	SDO	O	C	I2C data output
71	VOLPWM	O	C	Guide volume PWM output
72	NC			Not used
73	TEST			Test terminal
74	SL	I		Signal level input
75	NC			Not used
76	NL1	I		RDS noise level input 1
77	SDBW	I		RDS SD input at NF
78	IDLE	I		IDLE input
79	MOVIE	I		Movie input
80	MEMHLD	O	C	Memory Keep output
81	$\overline{\text{ADPW}}$	O	C	A/D converter power supply output
82,83	VDD			Power supply
84	GND			GND
85	RX	I		IP-BUS data input
86	TX	O	C	IP-BUS data output
87	NC			Not used
88	$\overline{\text{LDET}}$	I		PLL lock sense input
89	$\overline{\text{RCK}}$	I		RDS clock input
90	RDS57K	I		RDS 57kHz pulse count input
91	$\overline{\text{REMIN}}$	I		Remote control data input
92	$\overline{\text{ASENS}}$	I		ACC power sense input
93	$\overline{\text{BSENS}}$	I		Back up power sense input
94	TUNPDI	I		PLL IC data input
95	KEYDT	I		Display data input
96	DPDT	O	C	Display data output
97	TUNPCK	O	C	PLL IC clock output
98	TUNPDO	O	C	PLL IC data output
99	TUNPCE	O	C	PLL IC chip enable output
100	PEE	O	C	PEE sound output

*PE5152A



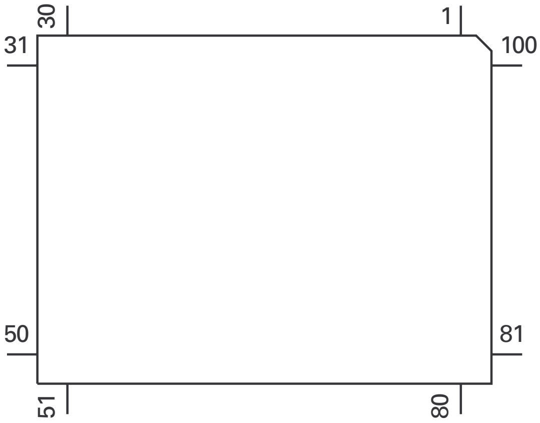
Format	Meaning
C	C MOS

● Pin Functions (PE5153A, AVM-P9000/ES)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	$\overline{\text{SWVDD}}$	O	C	Display microcomputer power supply output
2	$\overline{\text{DSENS}}$	I		Grille detach sense input
3	$\overline{\text{NAVSEN}}$	I		Navigation system connect sense input
4	NAVMIX	I		Navigation guide voice trigger input
5	TESTIN	I		Test program mode input
6–10	NC			Not used
11	$\overline{\text{RESET}}$	I		Reset input
12	XT2			Not used
13	XT1			VSS
14	VSS			GND
15	X2			Crystal oscillator connection pin
16	X1			Crystal oscillator connection pin
17	REGOFF			VDD
18	REGC			VSS
19	VDD			Power supply
20	VPWR	O	C	Back light, screen system power ON output
21	SYSPW	O	C	System power supply control output
22	SHRST	O	C	SH reset output
23	MODELIN	I		Model select input
24	IPPW	O	C	IP-BUS driver power supply output
25	ASENBO	O	C	Slave power supply control output
26	NC			Not used
27	TELIN	I		Telephone mute input
28	MUTE	O	C	Mute output
29	AMUTE	O	C	All system mute output
30	PBSENS	I		Parking sense input
31	VCAMUTE	O	C	Monitor SP amp mute output
32	NC			Not used
33	VCK	O	C	Clock output for electronic volume
34	VST	O	C	Strobe pulse output for electronic volume
35	VDT	O	C	Data output for electronic volume
36	NC			Not used
37	ISENS	I		Illumination sense input
38	SD	I		SD input
39	$\overline{\text{ST}}$	I		Stereo input
40	VSS			GND
41	VDD			Power supply
42	SEL0	O	C	Selector information output 0 (00:NAVI / 01:TV)
43	SEL1	O	C	Selector information output 1 (10:VTR1 / 11:VTR2)
44–46	NC			Not used
47	FM/AM	O	C	RDS decoder power supply control output
48	LOCL	O	C	Local L output
49	LOCH	O	C	Local H output
50	TUNPCE2	O	C	EEPROM chip enable output
51	ROMDATA	O	C	ROM correction data output
52	ROMCLK	O	C	ROM correction clock output
53	ROMCS	O	C	ROM correction chip select output
54	FVMUTE	O	C	Front picture mute output
55	VSEL0	O	C	Picture select output 0 (0:NAVI / 1:COMP)
56	VSEL1	O	C	Picture select output 1 (0:The rest / 1:OSD)
57	RMSEL	O	C	Rear monitor select (0:DVD / 1:VTR)
58	RMSEL2	O	C	Rear monitor select 2 (0:RMSEL / 1:TV)
59	$\overline{\text{NAVION}}$	O	C	Guide voice control output (0:ON / 1:OFF)
60	RVMUTE	O	C	Rear picture mute output
61	RMMUTE	O	C	Rear monitor voice mute output
62	PCL	O	C	Clock adjustment output
63	$\overline{\text{BRXEN}}$	O	C	P-BUS communication enable output

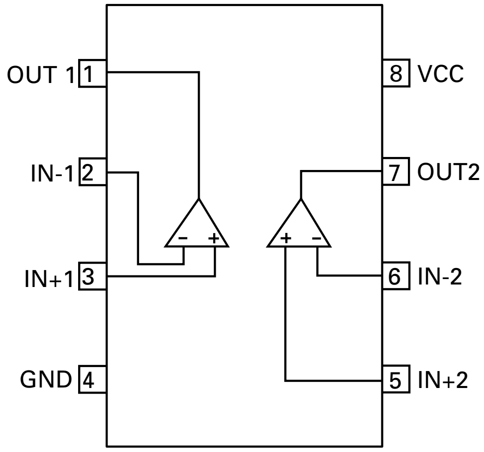
Pin No.	Pin Name	I/O	Format	Function and Operation
64	$\overline{BSRQ}$	I		P-BUS communication request input
65	BCK	I/O		P-BUS clock input/output
66	BSI	I		P–BUS serial data input
67	BSO	O	C	P–BUS serial data output
68	$\overline{BRST}$	O	C	P-BUS reset output
69	SCL	O	C	I2C clock output
70	SDO	O	C	I2C data output
71	VOLPWM	O	C	Guide volume PWM output
72	NC			Not used
73	TEST			Test terminal
74	SL	I		Signal level input
75–77	NC			Not used
78	IDLE	I		IDLE input
79	MOVIE	I		Movie input
80	MEMHLD	O	C	Memory Keep output
81	$\overline{ADPW}$	O	C	A/D converter power supply output
82,83	VDD			Power supply
84	GND			GND
85	RX	I		IP-BUS data input
86	TX	O	C	IP-BUS data output
87–90	NC			Not used
91	$\overline{REMIN}$	I		Remote control data input
92	$\overline{ASENS}$	I		ACC power sense input
93	$\overline{BSENS}$	I		Back up power sense input
94	TUNPDI	I		PLL IC data input
95	KEYDT	I		Display data input
96	DPDT	O	C	Display data output
97	TUNPCK	O	C	PLL IC clock output
98	TUNPDO	O	C	PLL IC data output
99	TUNPCE	O	C	PLL IC chip enable output
100	PEE	O	C	PEE sound output

*PE5153A



Format	Meaning
C	C MOS

*NJU7032M

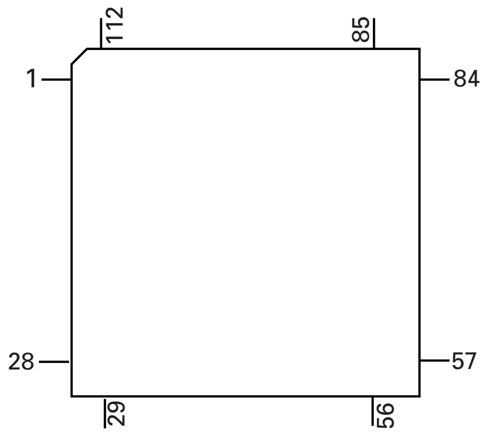


● Pin Functions (PD3415A)

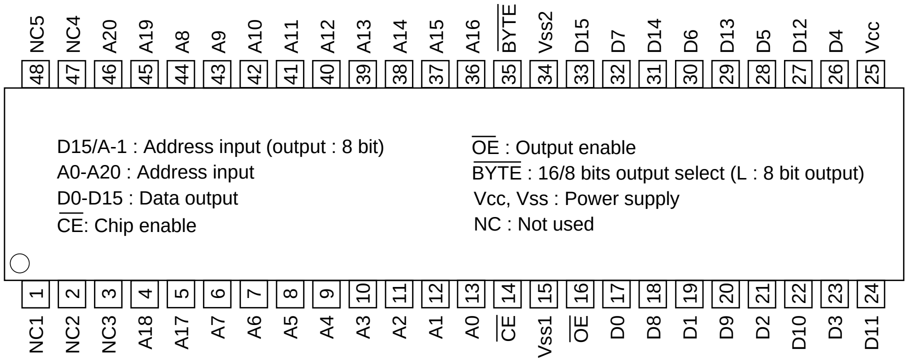
Pin No.	Pin Name	I/O	Function and Operation
1	IRL2	I	Test mode entry input
2	NC		Not used
3	VSS		GND
4–11	AD0-7	I/O	Data bus input/output
12	VSS		GND
13,14	AD8,9	I/O	Data bus input/output
15	VCC		5V
16–21	AD10-15	I/O	Data bus input/output
22	VSS		GND
23	NC		Not used
24–30	A1-7	O	Address bus output
31	VSS		GND
32–39	A8-15	O	Address bus output
40	VSS		GND
41,42	A16,17	O	Address bus output
43	VCC		5V
44–47	A18-21	O	Address bus output
48,49	NC		Not used
50	$\overline{\text{CS2}}$	O	Q2i chip select output
51	$\overline{\text{CS3}}$	O	ROM1 chip select output
52	VSS		GND
53	$\overline{\text{CS4}}$	O	ROM2 chip select output
54	$\overline{\text{CS5}}$	O	ROM3 chip select output
55	$\overline{\text{CS6}}$	O	Q2i chip select output
56	$\overline{\text{WAIT}}$	I	Wait input
57	$\overline{\text{WE0}}$	O	Write strobe output (Low)
58	$\overline{\text{WE1}}$	O	Write strobe output (High)
59	$\overline{\text{RD}}$	O	Read strobe output
60	$\overline{\text{Q2ON}}$	O	Q2i power supply output
61	VSS		GND
62	$\overline{\text{Q2RESET}}$	O	Q2i reset output
63	PA9	O	Idle output
64	TIOCA1	O	Notification when animation do indication output
65	TIOCB1	I	VSYNC width measurement input
66	DACK0	O	DMA transfer request receive output
67	$\overline{\text{DREQ0}}$	I	DMA transfer request input
68,69	NC		Not used
70	VCC		5V

Pin No.	Pin Name	I/O	Function and Operation
71	NC		Not used
72	VSS		GND
73	EXTAL		Oscillation continuation terminal
74	XTAL	I	Oscillation continuation terminal
75	VCC		5V
76	$\overline{\text{NMI}}$	I	Pull up
77	VCC		5V
78	NC		Not used
79	$\overline{\text{RES}}$	I	Reset input
80	MD0	I	Function mode set up input 0
81	MD1	I	Function mode set up input 1
82	MD2	I	Function mode set up input 2
83,84	VCC		5V
85	AVCC		Analog power supply
86	AVREF		A/D converter reference voltage
87	SADATA		Spectral analyze data
88–90	AN1-3		GND
91	AVSS		A/D GND
92–95	AN4-7		GND
96	VSS		GND
97	SASEL0	O	Spectral analyze data frequency select output A
98	SASEL1	O	Spectral analyze data frequency select output B
99	VCC		5V
100	SASEL2	O	Spectral analyze data frequency select output C
101	NC		Not used
102	TESTOUT4	O	All over screen indication output
103–105	NC		Not used
106	VSS		GND
107	RXD0	I	Display data input
108	TXD0	O	Title scroll notification output
109,110	NC		Not used
111	IRL0	I	Q2i interrupt request input
112	NC		Not used

*PD3415A

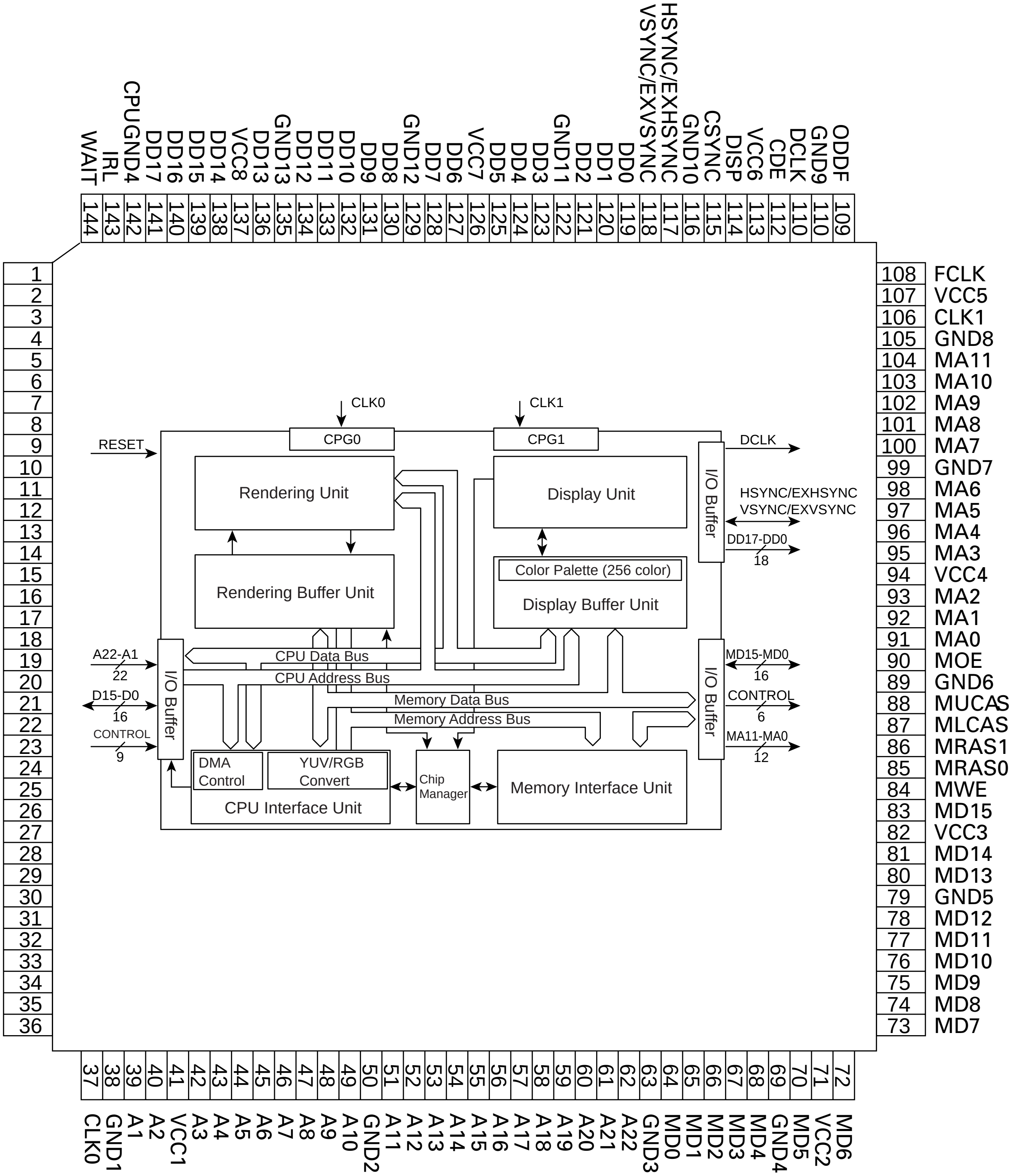


*PD8064A, *PD8065A

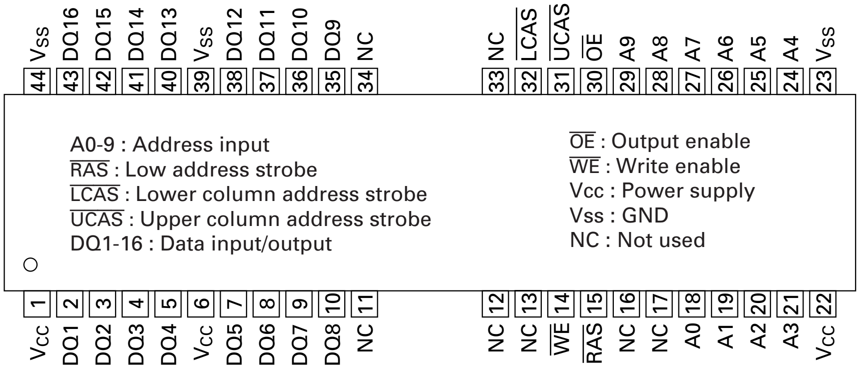

48 NC5
47 NC4
46 A20
45 A19
44 A8
43 A9
42 A10
41 A11
40 A12
39 A13
38 A14
37 A15
36 A16
35 BYTE
34 Vss2
33 D15
32 D7
31 D14
30 D6
29 D13
28 D5
27 D12
26 D4
25 Vcc
1 NC1
2 NC2
3 NC3
4 A18
5 A17
6 A7
7 A6
8 A5
9 A4
10 A3
11 A2
12 A1
13 A0
14 CE
15 Vss1
16 OE
17 D0
18 D8
19 D1
20 D9
21 D2
22 D10
23 D3
24 D11

D15/A-1 : Address input (output : 8 bit)
A0-A20 : Address input
D0-D15 : Data output
CE: Chip enable
OE : Output enable
BYTE : 16/8 bits output select (L : 8 bit output)
Vcc, Vss : Power supply
NC : Not used

HD64412FI


144 WAIT
143 IRL
142 CPUGND4
141 DD17
140 DD16
139 DD15
138 DD14
137 VCC8
136 DD13
135 GND13
134 DD12
133 DD11
132 DD10
131 DD9
130 DD8
129 GND12
128 DD7
127 DD6
126 VCC7
125 DD5
124 DD4
123 DD3
122 GND11
121 DD2
120 DD1
119 DD0
118 VSYNC/EXVSYNC
117 HSYNC/EXHSYNC
116 GND10
115 CSYNC
114 DISP
113 VCC6
112 CDE
110 DCLK
110 GND9
109 ODDF
1 DREQ
2 D0
3 D1
4 CPUVCC1
5 D2
6 CPUGND1
7 D3
8 D4
9 D5
10 D6
11 D7
12 CPUGND2
13 D8
14 D9
15 D10
16 CPUVCC2
17 D11
18 D12
19 CPUGND3
20 D13
21 D14
22 D15
23 PLLGND
24 CAP0
25 PLLVCC
26 CS0
27 CS1
28 RD
29 WE0
30 WE1
31 DACK
32 MODE0
33 MODE1
34 MODE2
35 TEST
36 RESET
108 FCLK
107 VCC5
106 CLK1
105 GND8
104 MA11
103 MA10
102 MA9
101 MA8
100 MA7
99 GND7
98 MA6
97 MA5
96 MA4
95 MA3
94 VCC4
93 MA2
92 MA1
91 MA0
90 MOE
89 GND6
88 MUCAS
87 MLCAS
86 MRAS1
85 MRAS0
84 MWE
83 MD15
82 VCC3
81 MD14
80 MD13
79 GND5
78 MD12
77 MD11
76 MD10
75 MD9
74 MD8
73 MD7
37 CLK0
38 GND1
39 A1
40 A2
41 VCC1
42 A3
43 A4
44 A5
45 A6
46 A7
47 A8
48 A9
49 A10
50 GND2
51 A11
52 A12
53 A13
54 A14
55 A15
56 A16
57 A17
58 A18
59 A19
60 A20
61 A21
62 A22
63 GND3
64 MD0
65 MD1
66 MD2
67 MD3
68 MD4
69 GND4
70 MD5
71 VCC2
72 MD6
CLK0
CLK1
CPG0
CPG1
RESET
DCLK
Rendering Unit
Display Unit
I/O Buffer
HSYNC/EXHSYNC
VSYNC/EXVSYNC
DD17-DD0
18
Color Palette (256 color)
Display Buffer Unit
Rendering Buffer Unit
A22-A1
22
CPU Data Bus
CPU Address Bus
D15-D0
16
Memory Data Bus
Memory Address Bus
CONTROL
9
I/O Buffer
MD15-MD0
16
CONTROL
6
MA11-MA0
12
DMA Control
YUV/RGB Convert
CPU Interface Unit
Chip Manager
Memory Interface Unit

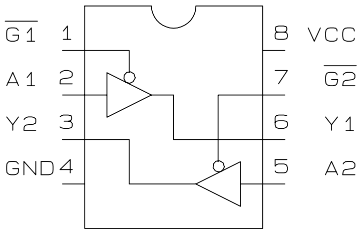
*MSM5118165D-60TS


44 Vss
43 DQ16
42 DQ15
41 DQ14
40 DQ13
39 Vss
38 DQ12
37 DQ11
36 DQ10
35 DQ9
34 NC
33 NC
32 LCAS
31 UCAS
30 OE
29 A9
28 A8
27 A7
26 A6
25 A5
24 A4
23 Vss
1 Vcc
2 DQ1
3 DQ2
4 DQ3
5 DQ4
6 Vcc
7 DQ5
8 DQ6
9 DQ7
10 DQ8
11 NC
12 NC
13 NC
14 WE
15 RAS
16 NC
17 NC
18 A0
19 A1
20 A2
21 A3
22 Vcc

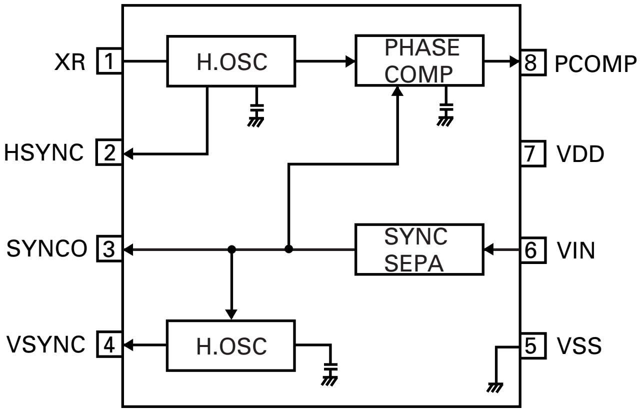
A0-9 : Address input
RAS : Low address strobe
LCAS : Lower column address strobe
UCAS : Upper column address strobe
DQ1-16 : Data input/output

OE : Output enable
WE : Write enable
Vcc : Power supply
Vss : GND
NC : Not used

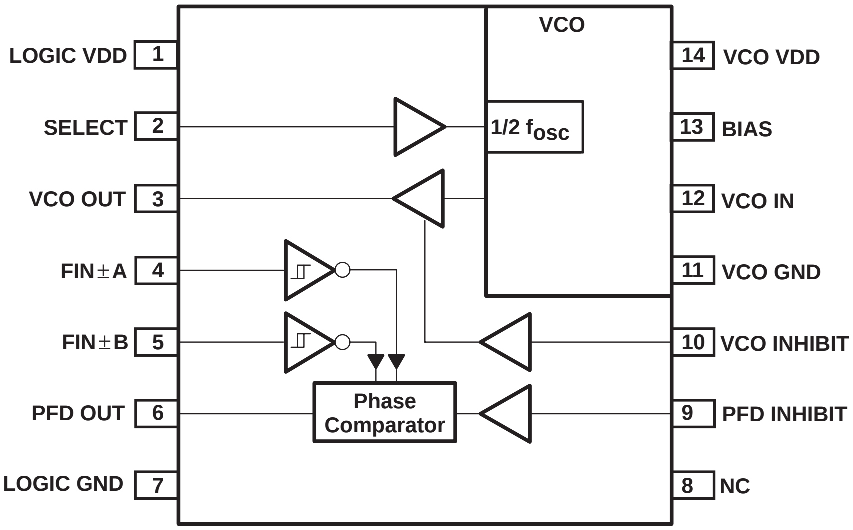
*TC7WH125FU


G1 1
A1 2
Y2 3
GND 4
8 VCC
7 G2
6 Y1
5 A2

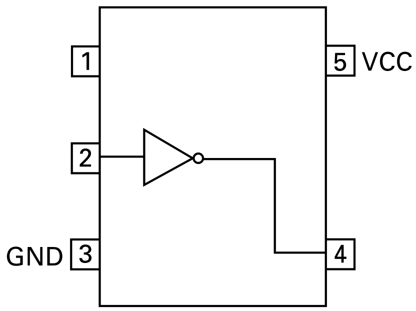
BA7046F


XR 1
HSYNC 2
SYNCO 3
VSYNC 4
8 PCOMP
7 VDD
6 VIN
5 VSS
H.OSC
PHASE COMP
SYNC SEPA
H.OSC

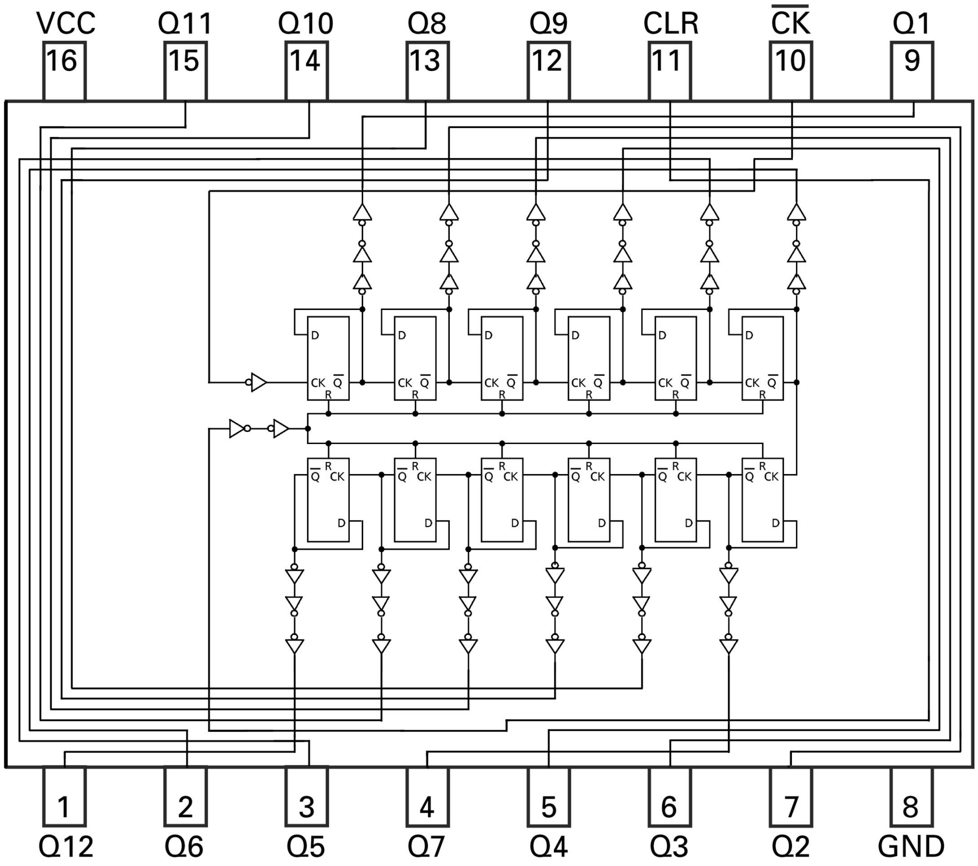
*TLC2932


LOGIC VDD 1
SELECT 2
VCO OUT 3
FIN±A 4
FIN±B 5
PFD OUT 6
LOGIC GND 7
14 VCO VDD
13 BIAS
12 VCO IN
11 VCO GND
10 VCO INHIBIT
9 PFD INHIBIT
8 NC
VCO
1/2 fosc
Phase Comparator

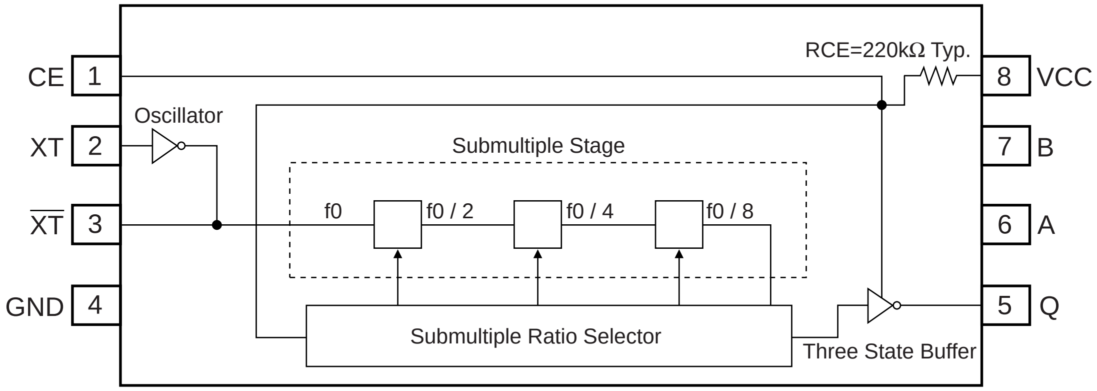
*TC7SET04FU


1
2
GND 3
5 VCC
4

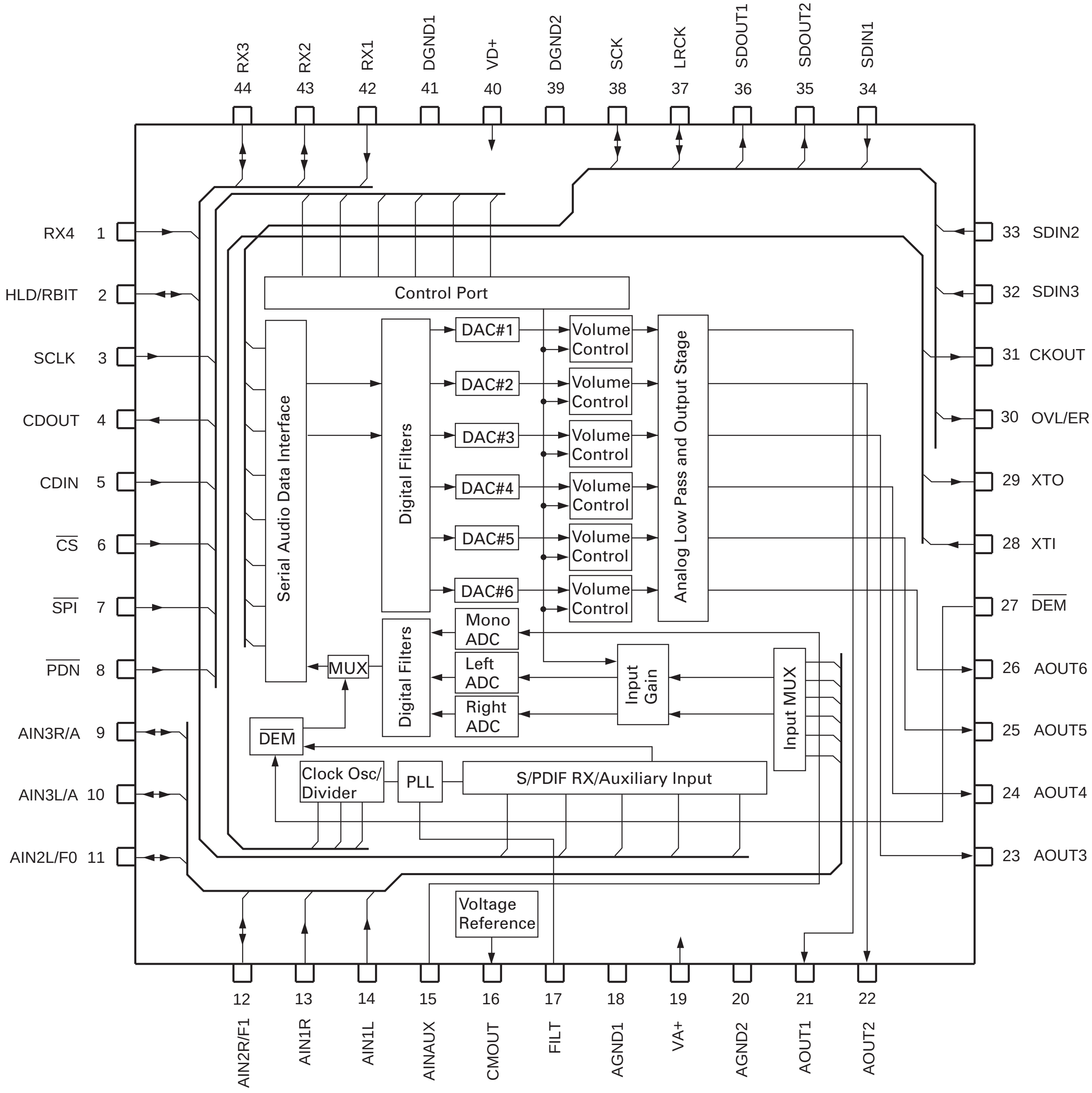
*TC74VHC4040FT


VCC 16
Q11 15
Q10 14
Q8 13
Q9 12
CLR 11
$\overline{CK}$ 10
Q1 9
D
CK
Q
R
1 Q12
2 Q6
3 Q5
4 Q7
5 Q4
6 Q3
7 Q2
8 GND

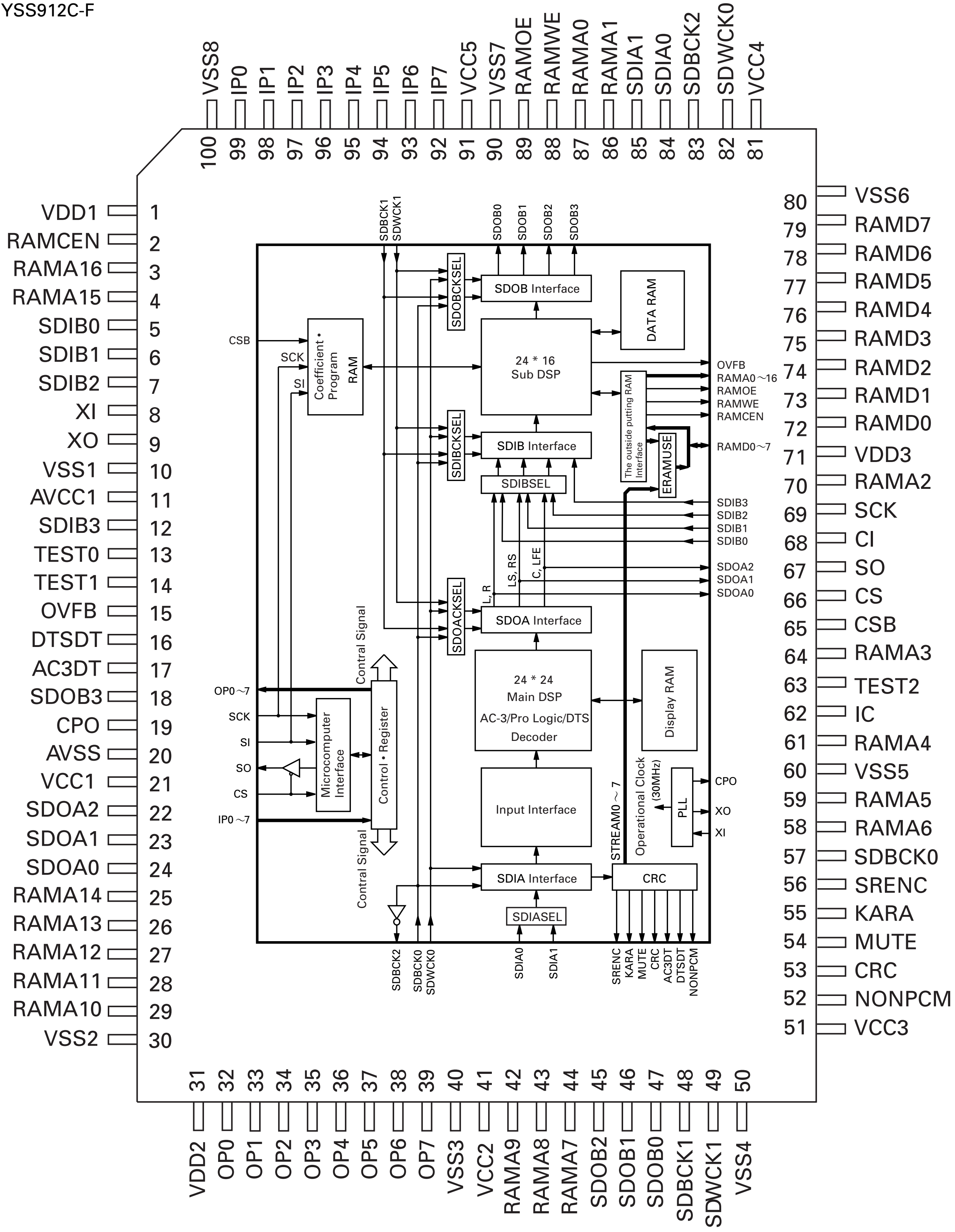
*TC3W03FU


CE 1
XT 2
$\overline{XT}$ 3
GND 4
RCE=220kΩ Typ.
8 VCC
7 B
6 A
5 Q
Oscillator
Submultiple Stage
f0
f0 / 2
f0 / 4
f0 / 8
Submultiple Ratio Selector
Three State Buffer

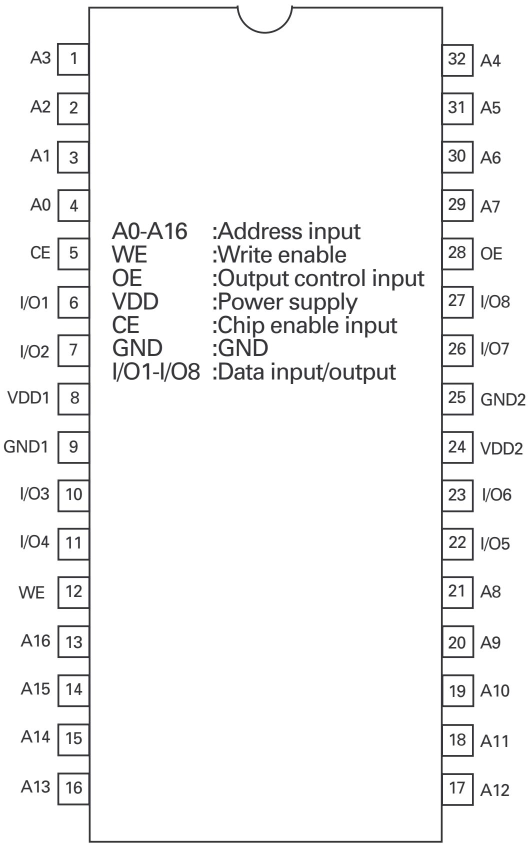
*CS4226-BQ


RX3 44
RX2 43
RX1 42
DGND1 41
VD+ 40
DGND2 39
SCK 38
LRCK 37
SDOUT1 36
SDOUT2 35
SDIN1 34
RX4 1
HLD/RBIT 2
SCLK 3
CDOUT 4
CDIN 5
$\overline{\text{CS}}$ 6
$\overline{\text{SPI}}$ 7
$\overline{\text{PDN}}$ 8
AIN3R/A 9
AIN3L/A 10
AIN2L/F0 11
33 SDIN2
32 SDIN3
31 CKOUT
30 OVL/ER
29 XTO
28 XTI
27 $\overline{\text{DEM}}$
26 AOUT6
25 AOUT5
24 AOUT4
23 AOUT3
12 AIN2R/F1
13 AIN1R
14 AIN1L
15 AINAUX
16 CMOUT
17 FILT
18 AGND1
19 VA+
20 AGND2
21 AOUT1
22 AOUT2
Control Port
Serial Audio Data Interface
Digital Filters
DAC#1
DAC#2
DAC#3
DAC#4
DAC#5
DAC#6
Volume Control
Volume Control
Volume Control
Volume Control
Volume Control
Volume Control
Analog Low Pass and Output Stage
Mono ADC
Left ADC
Right ADC
Digital Filters
MUX
Input Gain
Input MUX
$\overline{\text{DEM}}$
Clock Osc/ Divider
PLL
S/PDIF RX/Auxiliary Input
Voltage Reference

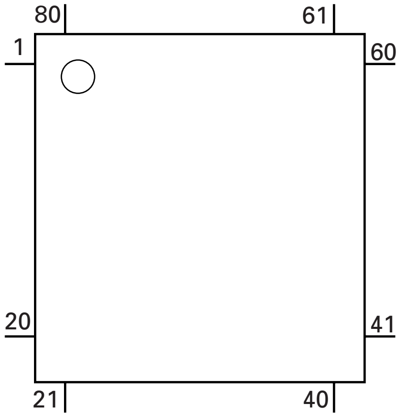
*YSS912C-F


1 VDD1
2 RAMCEN
3 RAMA16
4 RAMA15
5 SDIB0
6 SDIB1
7 SDIB2
8 XI
9 XO
10 VSS1
11 AVCC1
12 SDIB3
13 TEST0
14 TEST1
15 OVFB
16 DTSDT
17 AC3DT
18 SDOB3
19 CPO
20 AVSS
21 VCC1
22 SDOA2
23 SDOA1
24 SDOA0
25 RAMA14
26 RAMA13
27 RAMA12
28 RAMA11
29 RAMA10
30 VSS2
31 VDD2
32 OP0
33 OP1
34 OP2
35 OP3
36 OP4
37 OP5
38 OP6
39 OP7
40 VSS3
41 VCC2
42 RAMA9
43 RAMA8
44 RAMA7
45 SDOB2
46 SDOB1
47 SDOB0
48 SDBCK1
49 SDWCK1
50 VSS4
51 VCC3
52 NONPCM
53 CRC
54 MUTE
55 KARA
56 SRENC
57 SDBCK0
58 RAMA6
59 RAMA5
60 VSS5
61 RAMA4
62 IC
63 TEST2
64 RAMA3
65 CSB
66 CS
67 SO
68 CI
69 SCK
70 RAMA2
71 VDD3
72 RAMD0
73 RAMD1
74 RAMD2
75 RAMD3
76 RAMD4
77 RAMD5
78 RAMD6
79 RAMD7
80 VSS6
81 VCC4
82 SDWCK0
83 SDBCK2
84 SDIA0
85 SDIA1
86 RAMA1
87 RAMA0
88 RAMWE
89 RAMOE
90 VSS7
91 VCC5
92 IP7
93 IP6
94 IP5
95 IP4
96 IP3
97 IP2
98 IP1
99 IP0
100 VSS8
SDBCK1
SDWCK1
SDOB0
SDOB1
SDOB2
SDOB3
SDOBCKSEL
SDOB Interface
DATA RAM
CSB
SCK
SI
Coefficient • Program RAM
24 * 16 Sub DSP
OVFB
RAMA0~16
RAMOE
RAMWE
RAMCEN
The outside putting RAM Interface
RAMD0~7
ERAMUSE
SDIBCKSEL
SDIB Interface
SDIBSEL
SDIB3
SDIB2
SDIB1
SDIB0
L, R
LS, RS
C, LFE
SDOA2
SDOA1
SDOA0
SDOACKSEL
SDOA Interface
Contral Signal
OP0~7
SCK
SI
SO
CS
IP0~7
Microcomputer Interface
Control • Register
24 * 24 Main DSP AC-3/Pro Logic/DTS Decoder
Display RAM
Input Interface
STREAM0~7
Operational Clock (30MHz)
PLL
CPO
XO
XI
Contral Signal
SDIA Interface
CRC
SDIASEL
SDBCK2
SDBCK0
SDWCK0
SDIA0
SDIA1
SRENC
KARA
MUTE
CRC
AC3DT
DTSDT
NONPCM

*TC55V8128BFTI-12


A3 1
A2 2
A1 3
A0 4
CE 5
I/O1 6
I/O2 7
VDD1 8
GND1 9
I/O3 10
I/O4 11
WE 12
A16 13
A15 14
A14 15
A13 16
32 A4
31 A5
30 A6
29 A7
28 OE
27 I/O8
26 I/O7
25 GND2
24 VDD2
23 I/O6
22 I/O5
21 A8
20 A9
19 A10
18 A11
17 A12
A0-A16 :Address input
WE :Write enable
OE :Output control input
VDD :Power supply
CE :Chip enable input
GND :GND
I/O1-I/O8 :Data input/output

*PD5572A


80
61
1
60
20
41
21
40

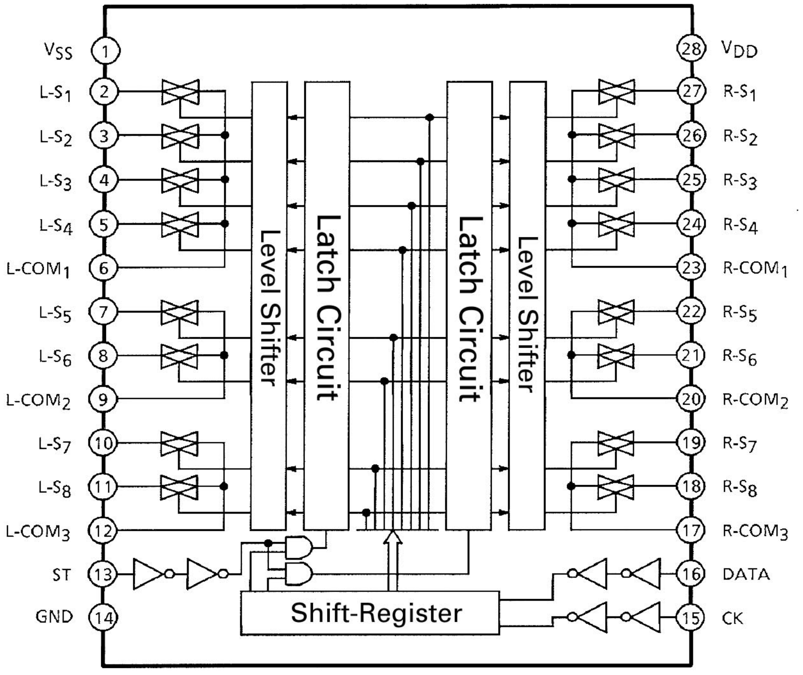
● Pin Functions (PD5572A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	CDCCK	O	C	CODEC serial clock output
2	VST1	O	C	Electronic volume strobe output 1
3	VST2	O	C	Electronic volume strobe output 2
4	VDT	O	C	Electronic volume data output
5	VCK	O	C	Electronic volume clock output
6	CNVSS			VSS joint
7	VST3	O	C	Electronic volume strobe output 3
8	NC			Not used
9	$\overline{\text{RESET}}$	I		Reset input
10	XOUT	O	C	Crystal oscillating element connection pin
11	VSS			GND
12	XIN	I		Crystal oscillating element connection pin
13	VCC			5V
14	$\overline{\text{NMI}}$	I		VCC joint
15	NC			Not used
16	CDCERR	I		CODEC error information input
17,18	NC			Not used
19	SEL0	O	C	Analog signal select output 0
20	SEL1	O	C	Analog signal select output 1
21–23	NC			Not used
24	DSPOUT	O	C	DSP serial data output
25	DSPIN	I		DSP serial data input
26	DSPCK	O	C	DSP serial clock output
27	NC			Not used
28	BSO	O	C	P–BUS serial data output
29	BSI	I		P–BUS serial data input
30	BSCK	I/O		P-BUS serial clock input/output

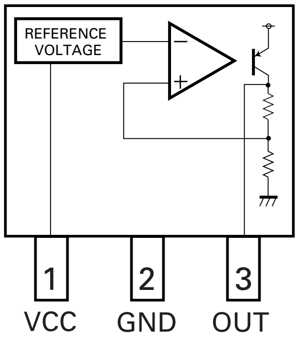
Pin No.	Pin Name	I/O	Format	Function and Operation
31	$\overline{\text{BRST}}$	I		P-BUS reset input
32	$\overline{\text{BSRQ}}$	I/O		P-BUS service request output pin
33	$\overline{\text{BRXEN}}$	I/O		Reception enable input/output
34–36	NC			Not used
37	IFHIZ	I		DSP microcomputer port Hiz set input
38	NC			Not used
39	$\overline{\text{TESTIN}}$	I		Test mode IN/test enable input
40	DSPPW	O	C	Power supply for DSP
41	MUTERQ	O	C	Hard mute output
42–54	NC			Not used
55	GSCK	O	C	Gain select serial clock output
56	GSDT	O	C	Gain select data output
57	GSST	O	C	Gain select strobe output
58	NC			Not used
59	$\overline{\text{DSPCS2}}$	O	C	DSP chip select output 2 (SUB DSP)
60	$\overline{\text{DSPRST}}$	O	C	DSP reset output
61	$\overline{\text{DSPCS1}}$	O	C	DSP chip select output 1 (MAIN DSP)
62–64	NC			Not used
65	$\overline{\text{CDCRST}}$	O	C	CODEC reset output
66	$\overline{\text{CDCCS}}$	O	C	CODEC chip select output
67	$\overline{\text{DMUTE}}$	O	C	Digital mute output
68–74	NC			Not used
75	AVSS			VSS joint
76	NC			Not used
77	VREF			A/D converter reference voltage input
78	AVCC			VCC joint
79	CDCIN	I		CODEC data input
80	CDCOUT	O	C	CODEC data output

Format	Meaning
C	C MOS

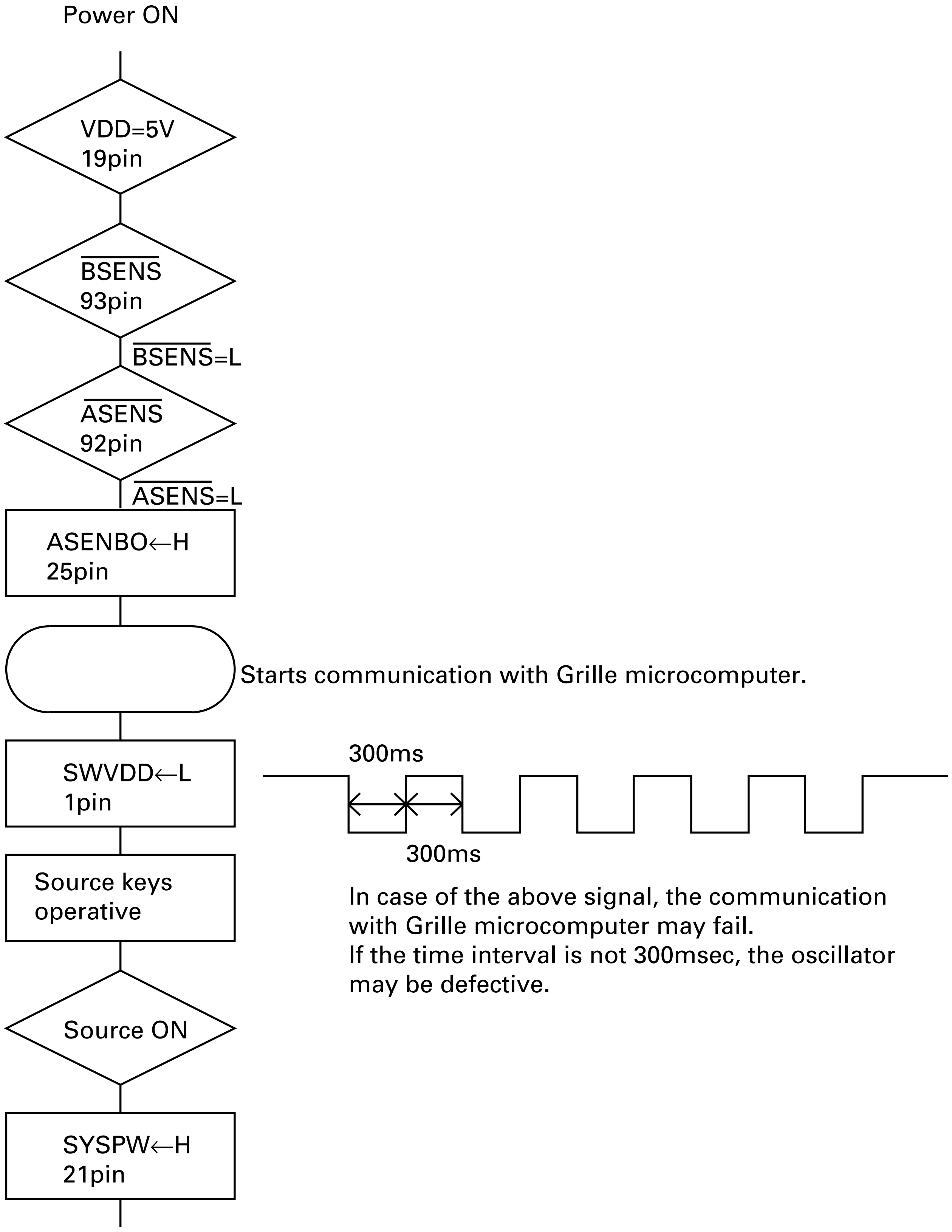
*TC9164AF


V_{SS}
1
L-S_1
2
L-S_2
3
L-S_3
4
L-S_4
5
L-COM_1
6
L-S_5
7
L-S_6
8
L-COM_2
9
L-S_7
10
L-S_8
11
L-COM_3
12
ST
13
GND
14
Level Shifter
Latch Circuit
Latch Circuit
Level Shifter
Shift-Register
V_{DD}
28
R-S_1
27
R-S_2
26
R-S_3
25
R-S_4
24
R-COM_1
23
R-S_5
22
R-S_6
21
R-COM_2
20
R-S_7
19
R-S_8
18
R-COM_3
17
DATA
16
CK
15

BA033FP


REFERENCE VOLTAGE
−
+
1
2
3
VCC
GND
OUT

7.3 OPERATIONAL FLOW CHART


Power ON
VDD=5V
19pin
$\overline{BSENS}$
93pin
$\overline{BSENS}$=L
$\overline{ASENS}$
92pin
$\overline{ASENS}$=L
ASENBO←H
25pin
Starts communication with Grille microcomputer.
SWVDD←L
1pin
300ms
300ms
Source keys operative
Source ON
SYSPW←H
21pin

In case of the above signal, the communication with Grille microcomputer may fail.
If the time interval is not 300msec, the oscillator may be defective.

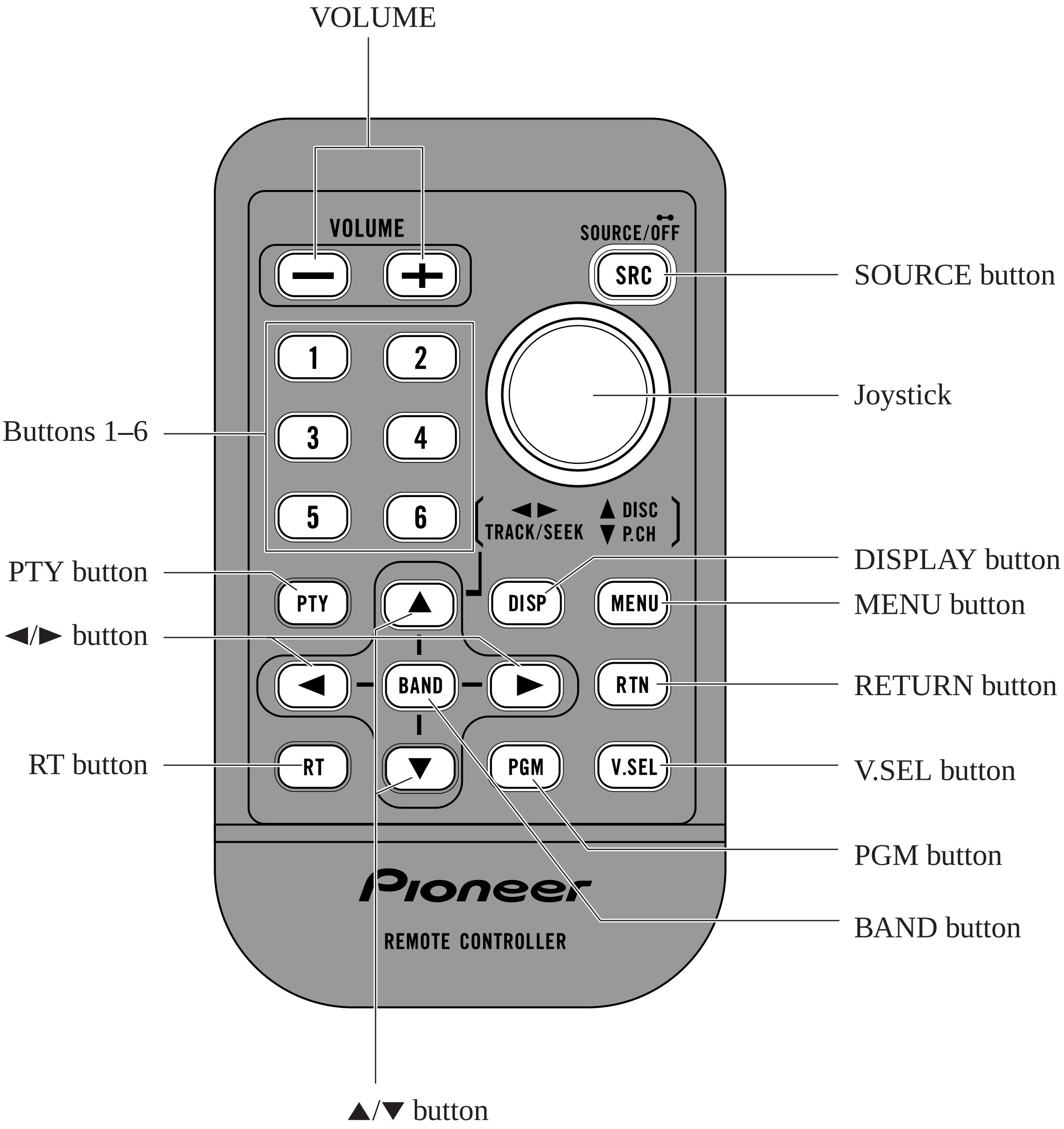
Completes power-on operation. (After that, proceed to each source operation.)

8. OPERATIONS AND SPECIFICATIONS

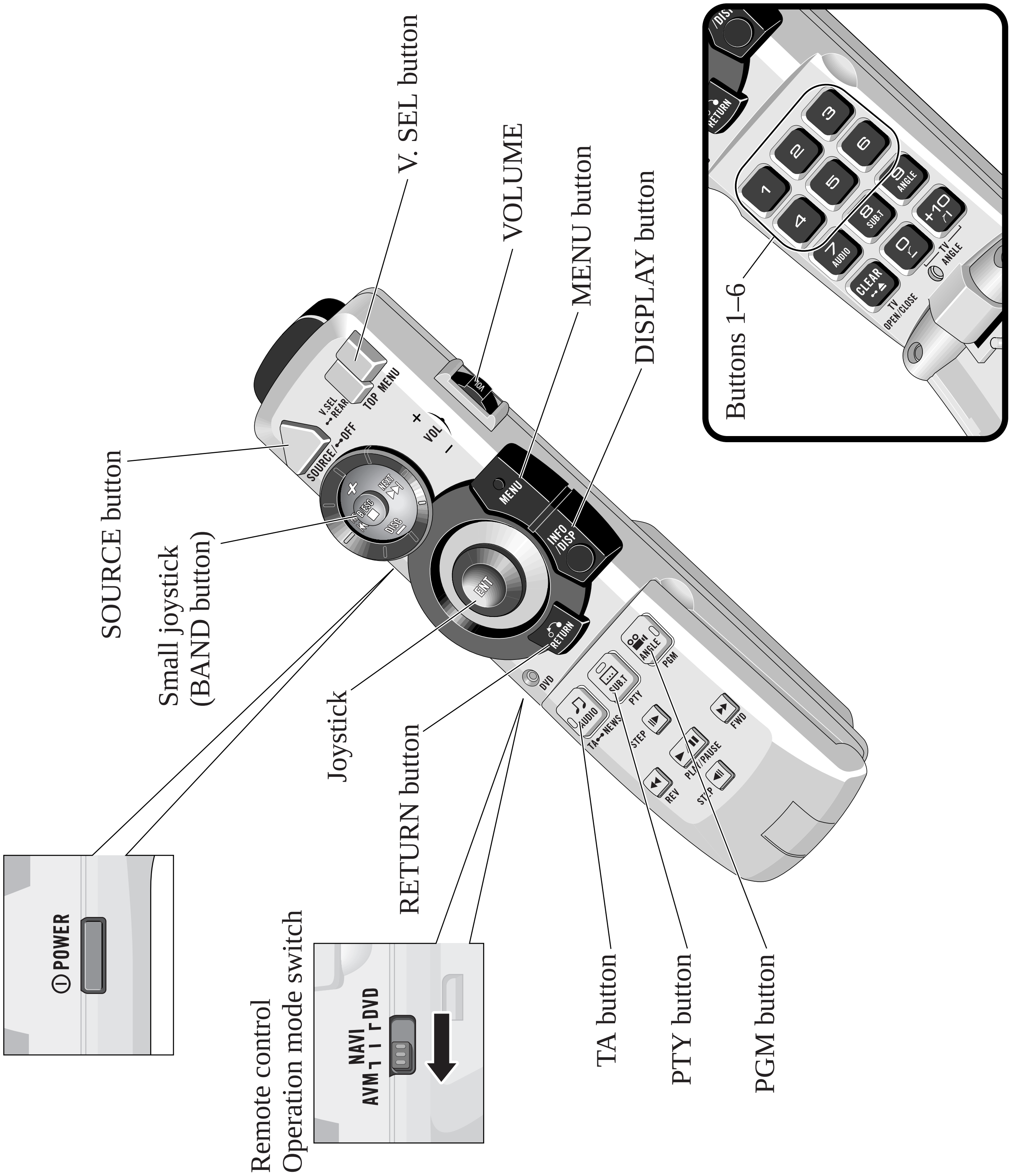
8.1 OPERATIONS

Key Finder

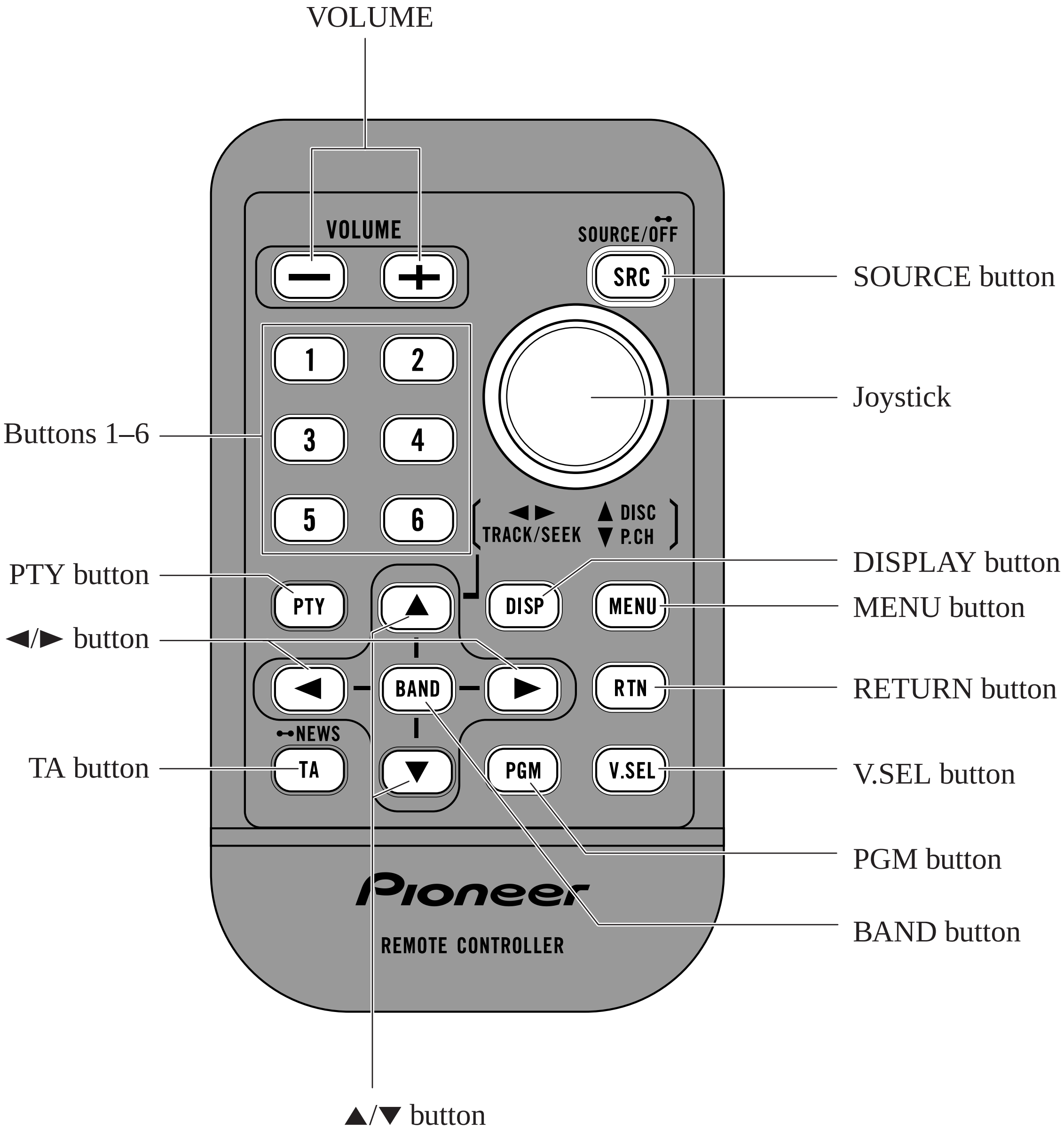
Remote Controller (AVM-P9000R/UC)


VOLUME
SOURCE button
Joystick
Buttons 1–6
PTY button
◄/► button
RT button
DISPLAY button
MENU button
RETURN button
V.SEL button
PGM button
BAND button
▲/▼ button
VOLUME
SOURCE/OFF
SRC
1
2
3
4
5
6
TRACK/SEEK
DISC
P.CH
PTY
DISP
MENU
BAND
RTN
RT
PGM
V.SEL
Pioneer
REMOTE CONTROLLER

Remote Controller (AVM-P9000R/EW)


V. SEL button
VOLUME
MENU button
DISPLAY button
Buttons 1–6
SOURCE button
Small joystick
(BAND button)
Joystick
RETURN button
Remote control
Operation mode switch
TA button
PTY button
PGM button
POWER
NAVI
AVM
DVD
V.SEL REAR
TOP MENU
SOURCE/OFF
VOL
MENU
INFO /DISP
ENT
RETURN
AUDIO
SUB.T
ANGLE
PGM
PTY
TA NEWS
STEP
REV
PLAY/PAUSE
FWD
CLEAR
TV OPEN/CLOSE
TV ANGLE

Remote Controller (AVM-P9000/ES)

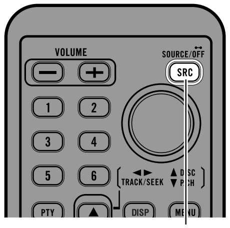

VOLUME
SOURCE button
Joystick
Buttons 1–6
DISPLAY button
PTY button
MENU button
◄/► button
RETURN button
TA button
V.SEL button
PGM button
BAND button
▲/▼ button
VOLUME
SOURCE/OFF
SRC
1
2
3
4
5
6
◄ ►
TRACK/SEEK
▲ DISC
▼ P.CH
PTY
DISP
MENU
BAND
RTN
NEWS
TA
PGM
V.SEL
Pioneer
REMOTE CONTROLLER

Operation for Each Source Unit

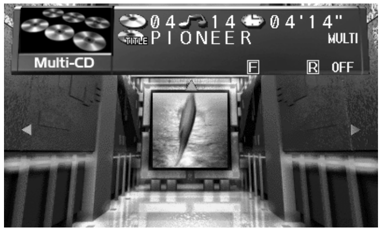
To Listen to Music

The following explains the initial operations required before you can listen to music.

1. **Select the desired source (e.g. Multi-CD Player).**


VOLUME
SOURCE/OFF
SRC
TRACK/SEEK
DISC
P.CH
PTY
DISP
MENU

Each press changes the Source ...


Multi-CD
04 14 04'14"
TITLE PIONEER
MULTI
F
R OFF

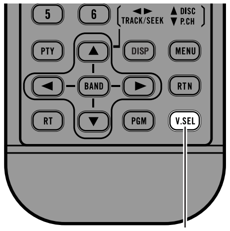
Each press of the SOURCE button selects the desired source in the following order:

DVD Player → TV → VIDEO → Tuner → MD Player → CD Player → Multi-CD Player → External 1 → External 2 → AUX → Speaker Input

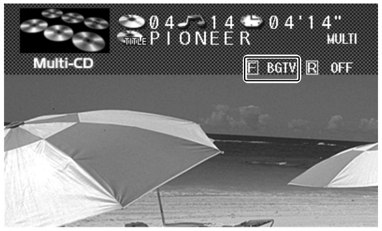
Note:
- External Unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this product. Two External Units can be controlled by this product, although “External” is displayed whether you select External Unit 1 or External Unit 2. When two External Units are connected, the allocation of them to External Unit 1 or External Unit 2 is automatically set by this product.
- In the following cases, the sound source will not change:
  - * When the sound source from another product is not connected to this product.
  - * When no magazine is set in the Multi-CD player.
  - * When no magazine is set in the Multi-DVD player.
  - * When no disc is set in the CD player.
  - * When no disc is set in the MD player.
  - * When the AUX (external input), VIDEO and Speaker Input are set to OFF.

- When this product’s blue/white lead is connected to the car’s Auto-antenna relay control terminal, the car’s Auto-antenna extends when this product’s source is switched ON. To retract the antenna, switch the source OFF.

2. **Select the desired picture.**


5
6
TRACK/SEEK
DISC
P.CH
PTY
DISP
MENU
BAND
RTN
RT
PGM
V.SEL

Each press changes the picture ...

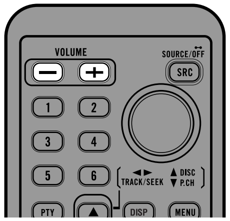

Multi-CD
04 14 04'14"
TITLE PIONEER
MULTI
F BGTV
R OFF

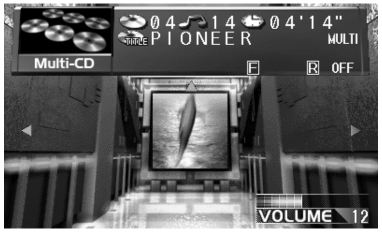
Each press of the V.SEL button selects the source in the following order:

Source Screen → Mobile Navigation Unit (NAVI) → TV Tuner Unit (BGTV) → Video (BGVTR)

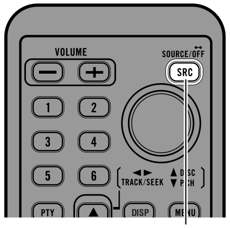
Note:
- Select “Source Screen” to hear/view playback of normal audio/video sources.
- You can select the Pioneer Mobile Navigation Unit only when that unit is switched on.
- You can select the TV Tuner Unit only when connecting it to this product. (The video source selected with the TV Tuner is displayed.)
- To select the VIDEO mode, switch the VIDEO mode ON in the Set Up Menu.

3. **Raise or lower the volume.**


VOLUME
SOURCE/OFF
SRC
TRACK/SEEK
DISC
P.CH
PTY
DISP
MENU


Multi-CD
04 14 04'14"
TITLE PIONEER
MULTI
F
R OFF
VOLUME 12

4. **Turn the source OFF.**


VOLUME
SOURCE/OFF
SRC
TRACK/SEEK
DISC
P.CH
PTY
DISP
MENU

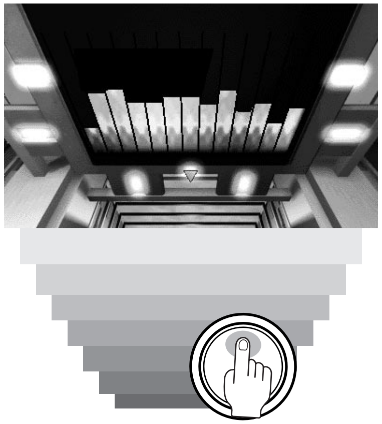
Hold for 1 second

When connecting a Multi-DVD player

You can switch on and off the Multi-DVD player independently from other units. Switching this product off independently does not switch the Multi-DVD player off. You have to switch the Multi-DVD player off separately.

- If, while “DVD” is selected as source, you switch off the Multi-DVD player, you can confirm it on the display.

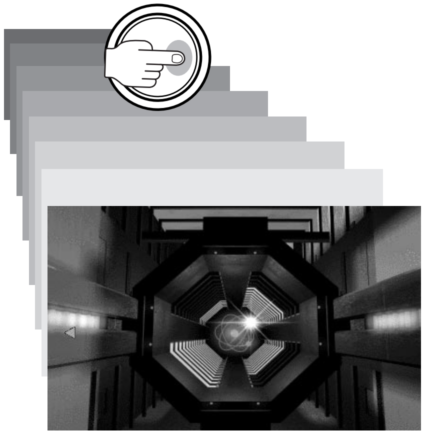
Virtual Theater Quick Tour



Move the joystick up to move in virtual space to the Spectrum Analyzer Room. The spectrum analyzer features a graph indicating the frequency of the sound currently in play.

When the power is turned on, the Center Room screen is displayed automatically. The screen appearing at the center of the room can be changed.

Move the joystick left to move to the entrance of the Function Menu Screen. If you click the joystick, you switch to the Function Menu Screen. Further explanation on how to use the Function Menu Screen will follow.

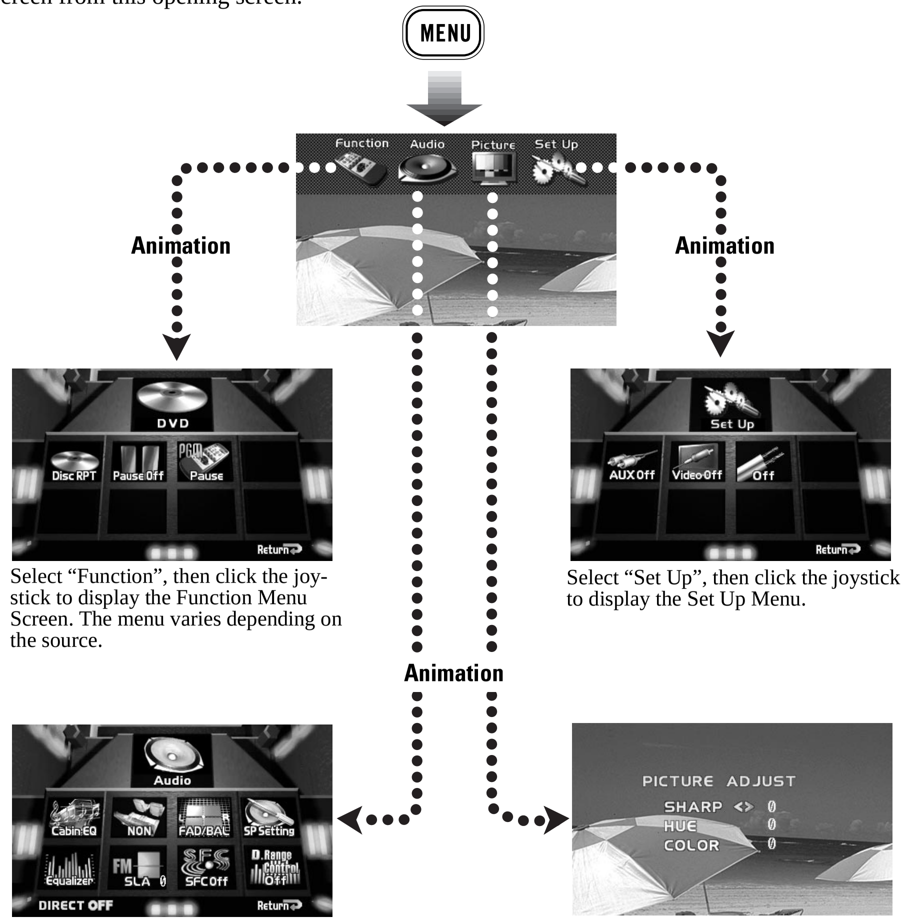


Move the joystick right to move to the Power Band Room. This screen provides a visual image of the volume settings. Click the joystick to change the power band display as below.

Monaural display ⟷ 4-band display

Menu Structure

The setting and adjusting operation of this product is done from the Main Menu. Press the MENU button, and four main menu icons appear on the screen: “Function”, “Audio”, “Picture” and “Set Up”. The selected function is highlighted in green. Move to each menu screen from this opening screen.


MENU
Function
Audio
Picture
Set Up
Animation
Animation
Animation
DVD
Disc RPT
Pause Off
PGM
Pause
Return
Set Up
AUX Off
Video Off
Off
Return
Audio
Cabin EQ
NON
FAD/BAL
SP Setting
Equalizer
FM SLA 0
SFC Off
D.Range Control Off
DIRECT OFF
Return
PICTURE ADJUST
SHARP <> 0
HUE 0
COLOR 0

Select “Function”, then click the joystick to display the Function Menu Screen. The menu varies depending on the source.

Select “Set Up”, then click the joystick to display the Set Up Menu.

Select “Audio”, then click the joystick to display the Audio Setting Menu.

Select “Picture”, then click the joystick to display the Picture Adjust Menu.

- The Picture icon appears only when the selected source is a visual medium.

Returning to the Center Room

You can return to the Center Room after you are finished in any of the sub-rooms quite simply with either of 2 options. Either use the joystick to select the Return option in that rooms screen, then click the joystick, or simply press the RETURN button on the remote controller. In either case, you are brought back to the Center Room.

Click the joystick

Click the joystick means to press the center of the joystick down and release one time.

Information Screen

By pressing the DISPLAY button on this remote control unit you can show the title list, make changes to the Source Plate Information Screen, etc.

Switching the Information Screen

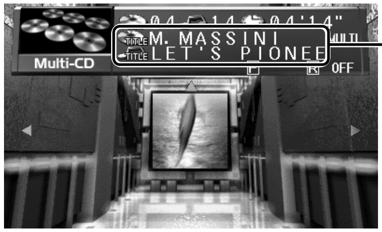
In the following, the Multi-CD Player is used as an example of source.

■ Multi-CD Player

Pressing the DISPLAY button switches the Information display on the Source Plate as follows. The title list appears on the plate and you can input disc titles here. You can also switch the titles displayed on the Flip-Down Plate.

DISP

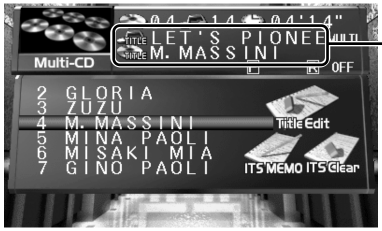
Source Plate Display



Entered title is displayed.

■ **When playing a CD TEXT disc**
The Disc Title and Track Title are displayed.

Flip-Down Plate Display



■ **When playing a CD TEXT disc**
Pressing the DISPLAY button switches the display as follows:

1 **Track Title**
Disc Title
⬇
2 **Disc Artist Name**
Disc Title
⬇
3 **Track Artist Name**
Disc Title

No Plate

Note:
- If the Multi-CD Player in use is not CD TEXT compatible, you cannot access CD TEXT-specific display features.

■ Tuner

Source Plate Display
⬇
Flip-Down Plate Display
(Preset Frequency List)
⬇
Flip-Down Plate Display
(Radio Text Display)
⬇
No Plate

■ TV

Source Plate Display
⬇
No Plate

- For televisions, the Source Plate Display disappears after about 8 seconds.

■ Multi-DVD Player

Source Plate Display
⬇
Flip-Down Plate Display
⬇
No Plate

- For DVDs, Video CDs and CDs, indications appear on the Flip-Down Plate Display as follows:

  For DVDs:
  Title list only

  For Video CDs:
  Title list and “Title Edit” for title input

  For CDs:
  Title list, “Title Edit” for title input, and ITS memory “ITS MEMO”, “ITS Clear”.

■ CD Player

Source Plate Display
⬇
Flip-Down Plate Display
⬇
No Plate

■ MD Player

Source Plate Display
⬇
No Plate

- Each press of the DISPLAY button switches the display on the Source Plate as follows:
  1. Disc Title
     Track Title

  2. Track Title
     Disc Title

  Pressing the DISPLAY button for 2 seconds scrolls the upper title.

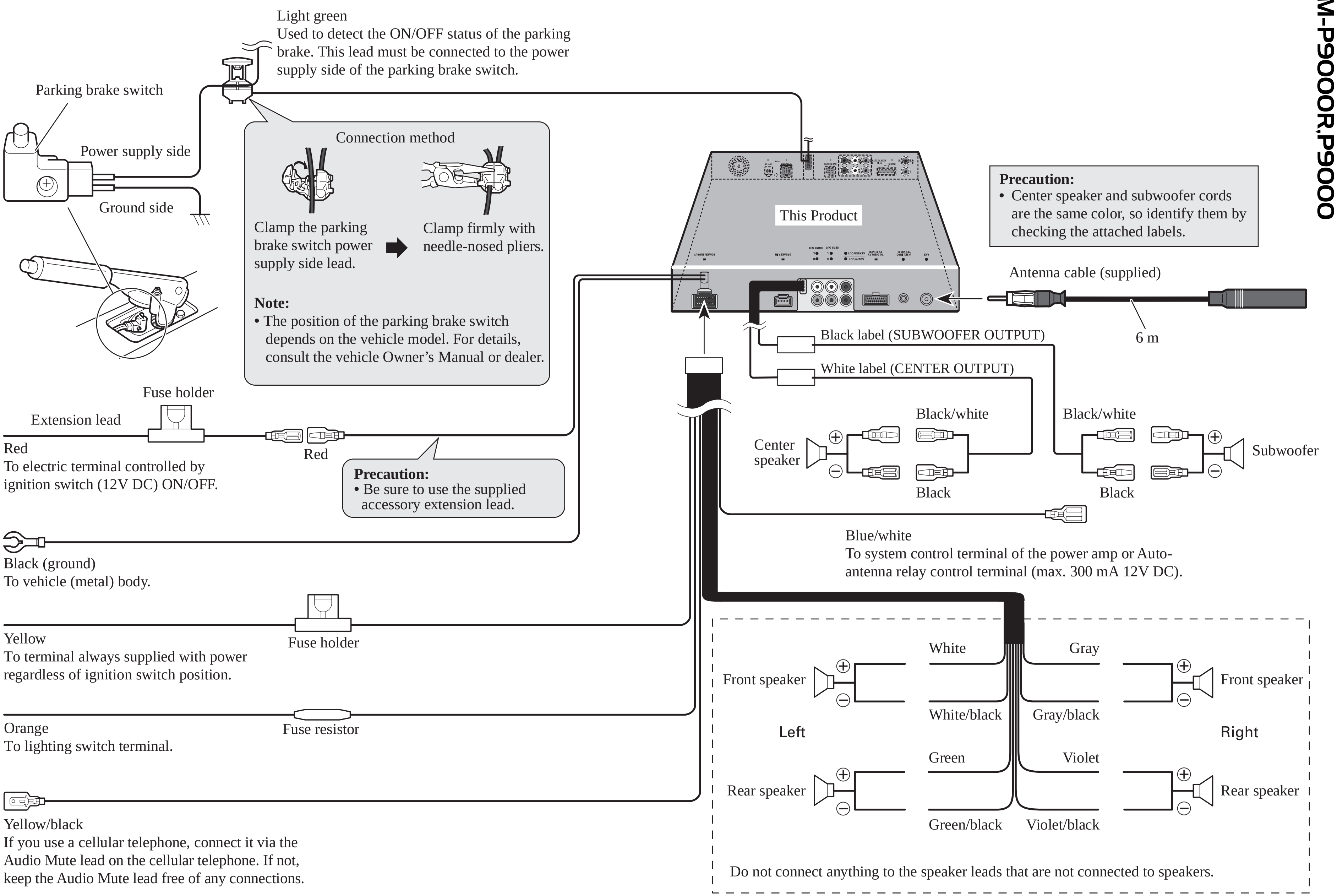
■ External Devices

External Devices are VIDEO, AUX, Speaker Input and External Units.

Source Plate Display
⬇
No Plate

- For visual sources, the Source Plate Display disappears after about 8 seconds.

Connecting the Power Cord



Light green
Used to detect the ON/OFF status of the parking brake. This lead must be connected to the power supply side of the parking brake switch.

Connection method

Clamp the parking brake switch power supply side lead.

Clamp firmly with needle-nosed pliers.

Note:
- The position of the parking brake switch depends on the vehicle model. For details, consult the vehicle Owner's Manual or dealer.

Precaution:
- Center speaker and subwoofer cords are the same color, so identify them by checking the attached labels.

Precaution:
- Be sure to use the supplied accessory extension lead.

Red
To electric terminal controlled by ignition switch (12V DC) ON/OFF.

Black (ground)
To vehicle (metal) body.

Yellow
To terminal always supplied with power regardless of ignition switch position.

Orange
To lighting switch terminal.

Yellow/black
If you use a cellular telephone, connect it via the Audio Mute lead on the cellular telephone. If not, keep the Audio Mute lead free of any connections.

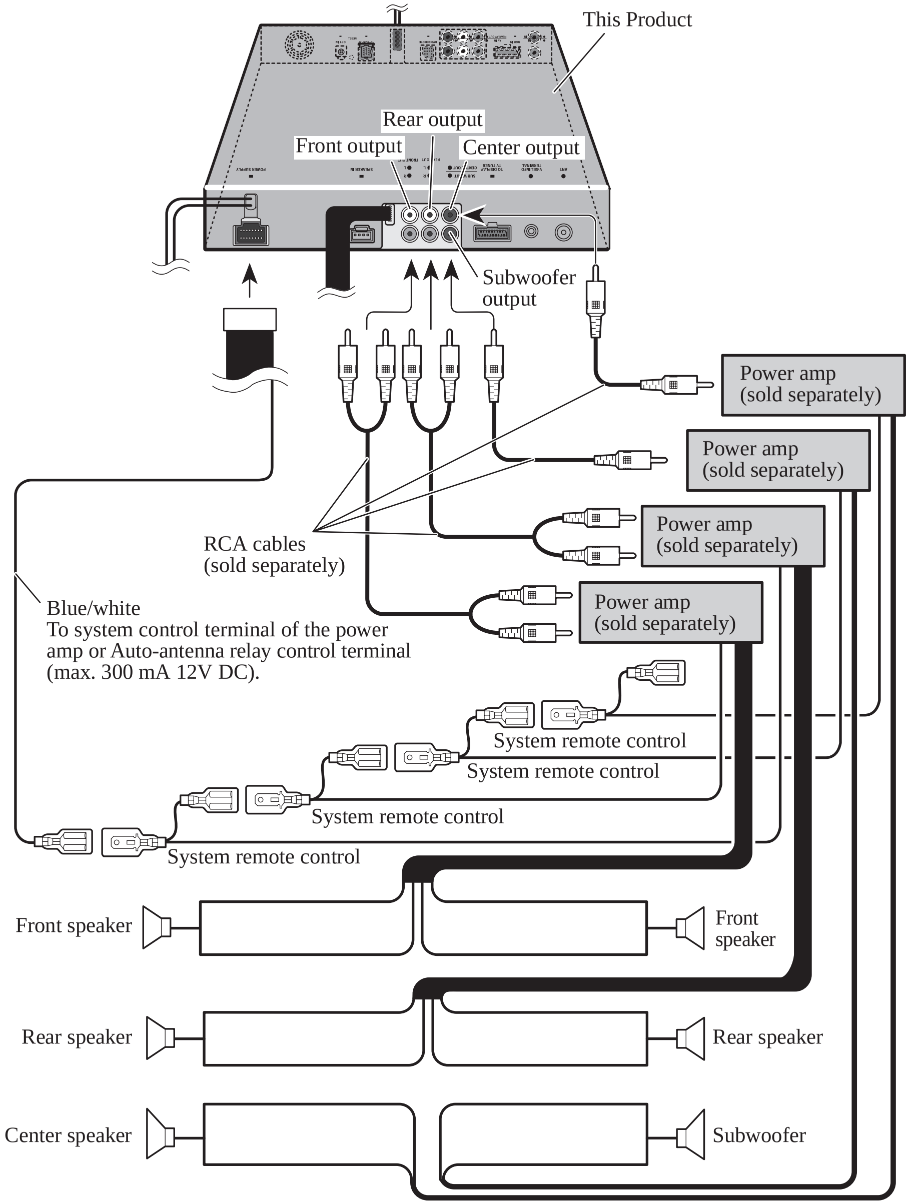
Blue/white
To system control terminal of the power amp or Auto-antenna relay control terminal (max. 300 mA 12V DC).

Do not connect anything to the speaker leads that are not connected to speakers.

Parking brake switch
Power supply side
Ground side
Fuse holder
Extension lead
Red
This Product
Antenna cable (supplied)
6 m
Black label (SUBWOOFER OUTPUT)
White label (CENTER OUTPUT)
Black/white
Black
Center speaker
Black/white
Black
Subwoofer
Fuse holder
Fuse resistor
White
White/black
Green
Green/black
Gray
Gray/black
Violet
Violet/black
Front speaker
Rear speaker
Left
Front speaker
Rear speaker
Right

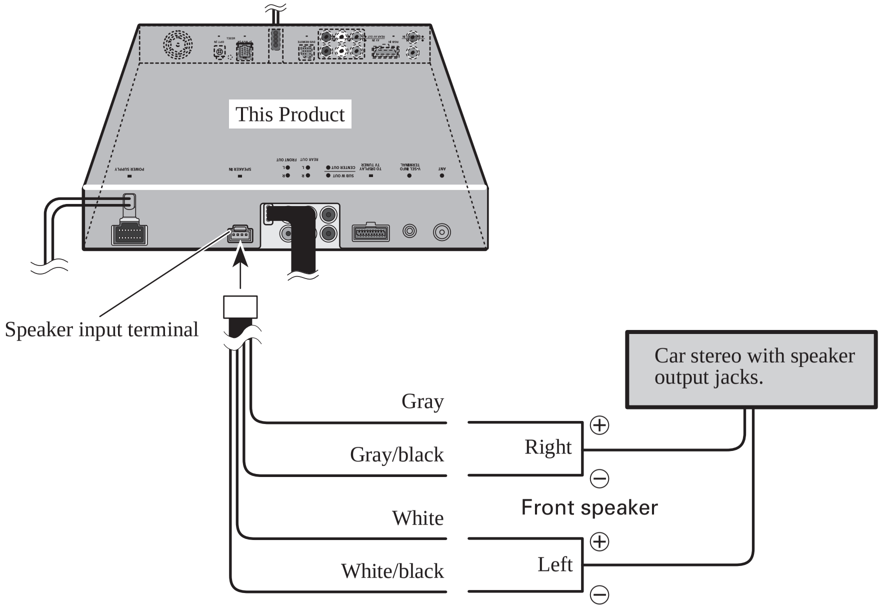
Connecting to a Sold Separately Power Amp

This product can be connected to a sold separately power amp using the RCA output jacks.

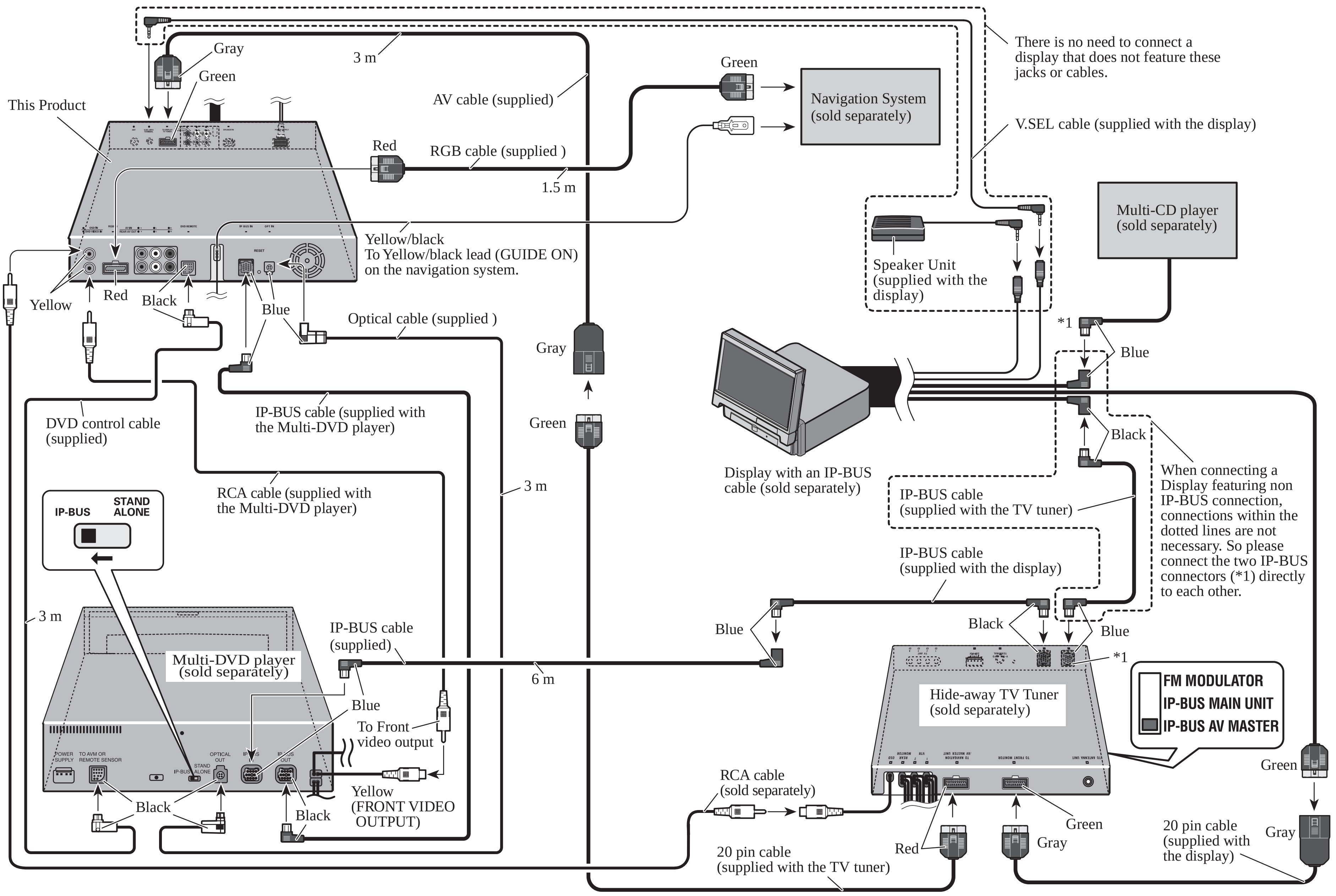

This Product
Rear output
Front output
Center output
Subwoofer output
Power amp
(sold separately)
Power amp
(sold separately)
Power amp
(sold separately)
Power amp
(sold separately)
RCA cables
(sold separately)
System remote control
System remote control
System remote control
System remote control
Front speaker
Rear speaker
Center speaker
Front speaker
Rear speaker
Subwoofer

Blue/white
To system control terminal of the power amp or Auto-antenna relay control terminal (max. 300 mA 12V DC).

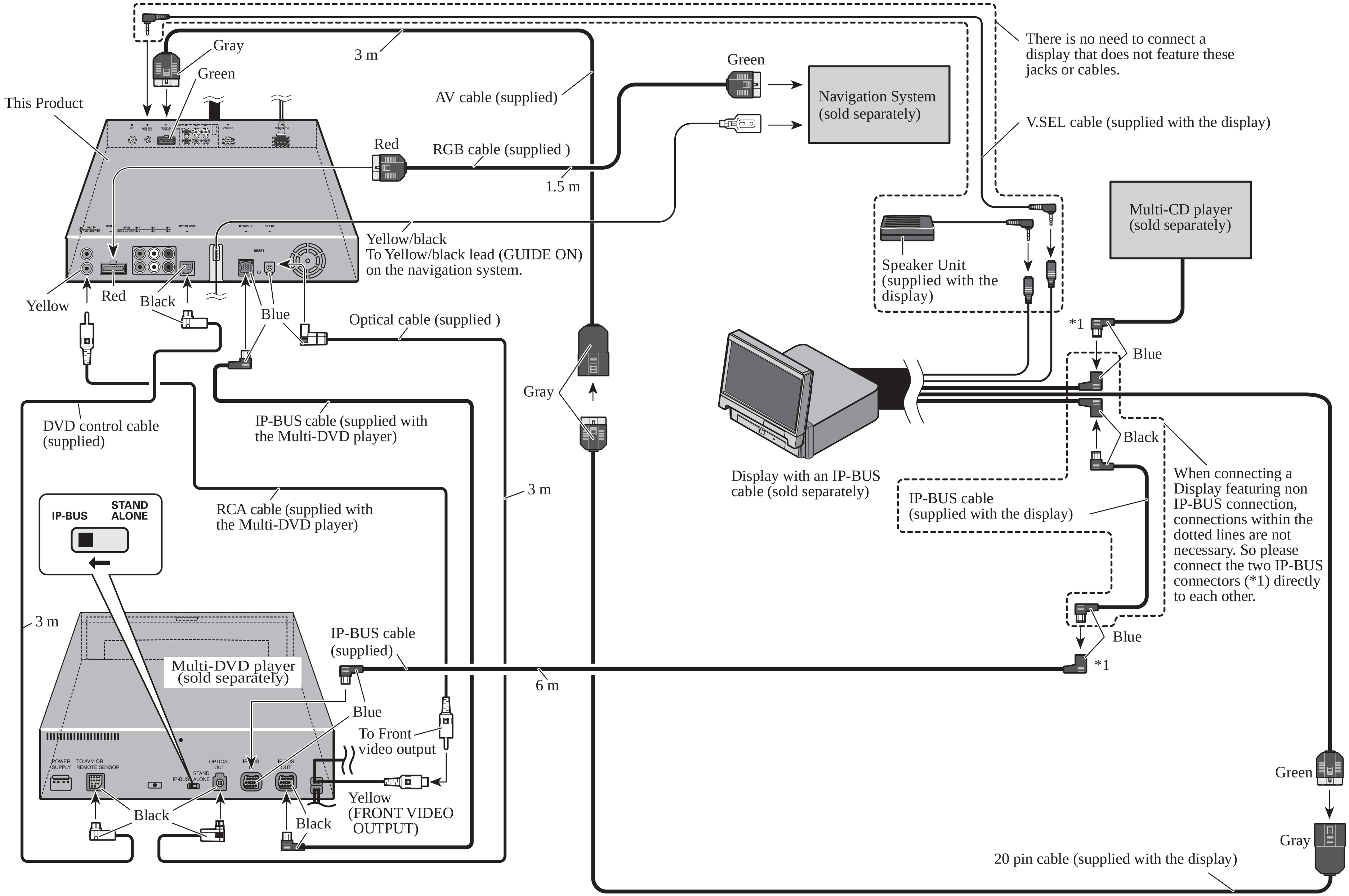
Perform these connections when using a different amp (sold separately).


This Product
Speaker input terminal
Car stereo with speaker output jacks.
Gray
Gray/black
White
White/black
Right
Left
Front speaker
⊕
⊖
⊕
⊖

Connecting the System (A)


There is no need to connect a display that does not feature these jacks or cables.
Gray
Green
3 m
AV cable (supplied)
Green
Navigation System (sold separately)
This Product
Red
RGB cable (supplied)
1.5 m
V.SEL cable (supplied with the display)
Multi-CD player (sold separately)
Yellow/black
To Yellow/black lead (GUIDE ON) on the navigation system.
Speaker Unit (supplied with the display)
Yellow
Red
Black
Blue
Optical cable (supplied)
*1
Blue
Gray
Green
DVD control cable (supplied)
IP-BUS cable (supplied with the Multi-DVD player)
Black
Display with an IP-BUS cable (sold separately)
When connecting a Display featuring non IP-BUS connection, connections within the dotted lines are not necessary. So please connect the two IP-BUS connectors (*1) directly to each other.
RCA cable (supplied with the Multi-DVD player)
3 m
IP-BUS cable (supplied with the TV tuner)
IP-BUS
STAND ALONE
IP-BUS cable (supplied with the display)
3 m
IP-BUS cable (supplied)
Blue
Black
Blue
Multi-DVD player (sold separately)
6 m
*1
Blue
To Front video output
Hide-away TV Tuner (sold separately)
FM MODULATOR
IP-BUS MAIN UNIT
IP-BUS AV MASTER
POWER SUPPLY
TO AVM OR REMOTE SENSOR
IP-BUS
STAND ALONE
OPTICAL OUT
IP-BUS
IP-BUS OUT
Black
Black
Yellow (FRONT VIDEO OUTPUT)
RCA cable (sold separately)
Green
Green
Red
Gray
20 pin cable (supplied with the display)
Gray
20 pin cable (supplied with the TV tuner)

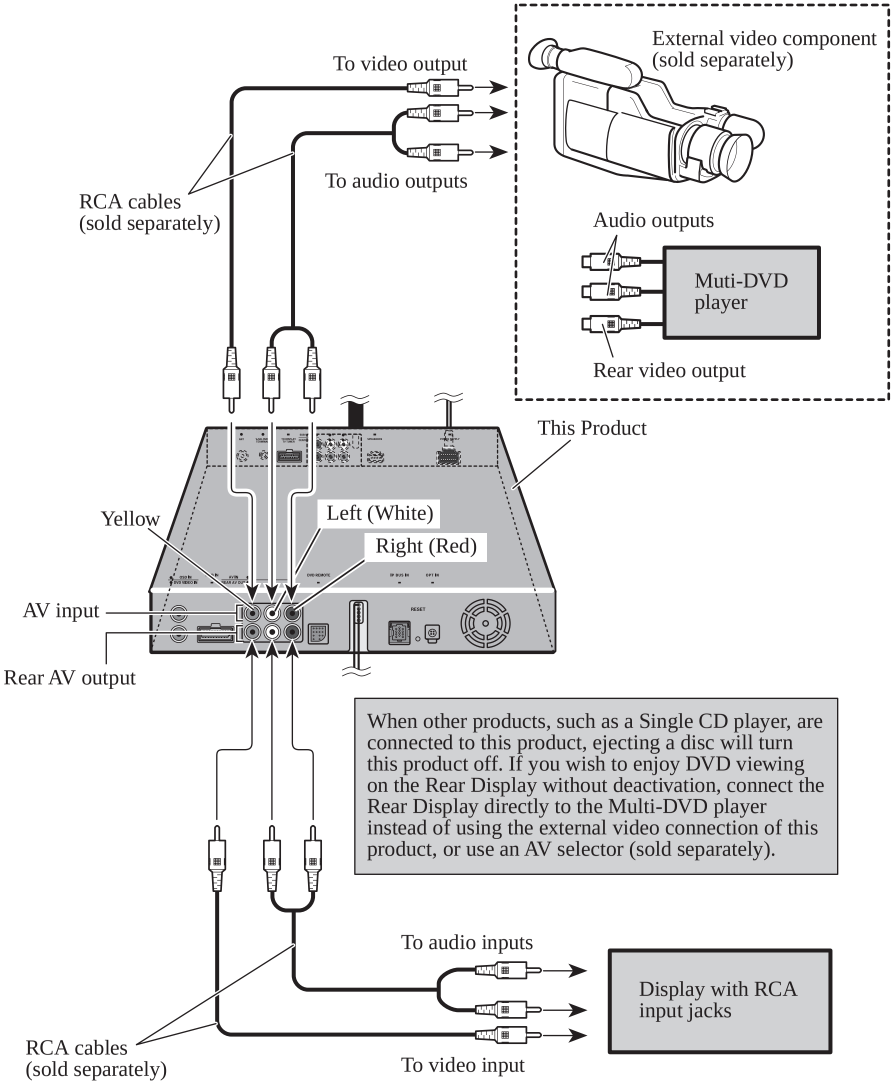
Connecting the System (B)


Gray
Green
3 m
This Product
AV cable (supplied)
Green
Navigation System
(sold separately)
There is no need to connect a display that does not feature these jacks or cables.
V.SEL cable (supplied with the display)
Red
RGB cable (supplied)
1.5 m
Yellow/black
To Yellow/black lead (GUIDE ON) on the navigation system.
Speaker Unit
(supplied with the display)
Multi-CD player
(sold separately)
Yellow
Red
Black
Blue
Optical cable (supplied)
*1
Blue
Gray
DVD control cable
(supplied)
IP-BUS cable (supplied with the Multi-DVD player)
Black
Display with an IP-BUS cable (sold separately)
IP-BUS cable
(supplied with the display)
When connecting a Display featuring non IP-BUS connection, connections within the dotted lines are not necessary. So please connect the two IP-BUS connectors (*1) directly to each other.
3 m
RCA cable (supplied with the Multi-DVD player)
IP-BUS
STAND ALONE
3 m
IP-BUS cable
(supplied)
Blue
*1
Multi-DVD player
(sold separately)
6 m
Blue
To Front video output
POWER SUPPLY
TO AVM OR REMOTE SENSOR
STAND ALONE
IP-BUS
OPTICAL OUT
IP-BUS IN
IP-BUS OUT
Black
Yellow
(FRONT VIDEO OUTPUT)
Black
Green
Gray
20 pin cable (supplied with the display)

VIDEO Input/Output Connection

It is possible to use an external video component by connecting it to the AV input on this product.

When connecting the Display with RCA input jacks to Rear AV output, you can also watch the external video component’s picture.


To video output
External video component
(sold separately)
To audio outputs
RCA cables
(sold separately)
Audio outputs
Muti-DVD
player
Rear video output
This Product
Yellow
Left (White)
Right (Red)
AV input
Rear AV output
To audio inputs
Display with RCA
input jacks
RCA cables
(sold separately)
To video input

When other products, such as a Single CD player, are connected to this product, ejecting a disc will turn this product off. If you wish to enjoy DVD viewing on the Rear Display without deactivation, connect the Rear Display directly to the Multi-DVD player instead of using the external video connection of this product, or use an AV selector (sold separately).

8.2 SPECIFICATIONS

● AVM-P9000R/UC

General

Power source ...... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system .... Negative type
Max. current consumption
  Backup current .... 10 A
  Accessory current .... 4 A
Dimensions .... 307 (W) × 51 (H) × 187 (D) mm
[12-1/8 (W) × 2 (H) × 7-3/8 (D) in.]
Weight .... 2.5 kg (5.5 lbs)

Amplifier

Continuous power output is 22 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.

Maximum power output .... 45 W × 6
Load impedance .... 4 Ω (4 – 8 Ω allowable)
Preout maximum output level/output
  impedance .... 2.2 V/1 kΩ
Decoder
  .... Linear PCM/Dolby Digital/Dolby Pro Logic/DTS
Equalizer (3-Band Parametric Equalizer)
  (Low) .... Frequency: 40/80/100/160 Hz
  (Mid) ....Frequency: 200/500/1k/2k Hz
  (High) .... Frequency: 3.15k/8k/10k/12.5k Hz
  Level .... ±12 dB
Subwoofer output
  Crossover frequency .... 63 Hz, 100 Hz, 200 Hz
  Level .... ±10 dB
Speaker setting
  Time Alignment...................... 0 – 200 inch (1 inch)
  Level .... ±10 dB
  Equalizer .... Band: 3 Band
Frequency: 100/125/160/200/250/315/
400/500/630/800/1k/1.25k/
1.6k/2k/2.5k/3.15k/4k/
5k/6.3k/8k Hz
Gain: ±12 dB
Crossover frequency: 63, 100, 200 Hz

FM tuner

Frequency range .... 87.9 – 107.9 MHz
Usable sensitivity
  .... 10 dBf (0.9 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 15 dBf (1.5 µV/75 Ω, mono)
Signal-to-noise ratio .... 70 dB (IHF-A network)
Distortion .... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response .... 30 – 15,000 Hz (±3 dB)
Stereo separation .... 40 dB (at 65 dBf, 1 kHz)
Selectivity .... 70 dB (2ACA)
Three-signal intermodulation
  (desired signal level) .... 30 dBf
(two undesired signal level: 100 dBf)

AM tuner

Frequency range .... 530 – 1,710 kHz (10 kHz)
Usable sensitivity .... 18 µV (S/N: 20 dB)
Selectivity .... 50 dB (±10 kHz)

Video

Composit input level .... 1 V/75 Ω
NTSC only
Composit output level .... 1 V/75 Ω
NTSC Directly Through Input

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

● AVM-P9000R/EW

General

Power source ...... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system .... Negative type
Max. current consumption
  Backup current .... 10 A
  Accessory current .... 4 A
Dimensions .... 307 (W) × 51 (H) × 187 (D) mm
Weight .... 2.5 kg

Amplifier

Maximum power output .... 45 W × 6
Continuous power output .... 22 W × 6
(DIN45324, +B=14.4 V)
Load impedance .... 4 Ω (4 – 8 Ω allowable)
Preout maximum output level/output
  impedance .... 2.2 V/1 kΩ
Decoder
  .... Linear PCM/Dolby Digital/Dolby Pro Logic/DTS
Equalizer (3-Band Parametric Equalizer)
  (Low) .... Frequency: 40/80/100/160 Hz
  (Mid) ....Frequency: 200/500/1k/2k Hz
  (High) .... Frequency: 3.15k/8k/10k/12.5k Hz
  Level .... ±12 dB
Subwoofer output
  Crossover frequency .... 63 Hz, 100 Hz, 200 Hz
  Level .... ±10 dB
Speaker setting
  Time Alignment .... 0 – 500 cm (2.5 cm)
  Level .... ±10 dB
  Equalizer .... Band: 3 Band
Frequency: 100/125/160/200/250/315/
400/500/630/800/1k/1.25k/
1.6k/2k/2.5k/3.15k/4k/
5k/6.3k/8k Hz
Gain: ±12 dB
Crossover frequency: 63, 100, 200 Hz

FM tuner

Frequency range .... 87.5 – 108 MHz
Usable sensitivity .... 11 dBf
(1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 16 dBf
(1.7 µV/75 Ω, mono)
Signal-to-noise ratio .... 70 dB (IEC-A network)
Distortion .... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response .... 30 – 15,000 Hz (±3 dB)
Stereo separation .... 40 dB (at 65 dBf, 1 kHz)

MW tuner

Frequency range .... 531 – 1,602 kHz (9 kHz)
Usable sensitivity .... 18 µV (S/N: 20 dB)
Selectivity .... 50 dB (±9 kHz)

LW tuner

Frequency range .... 153 – 281 kHz
Usable sensitivity .... 30 µV (S/N: 20 dB)
Selectivity .... 50 dB (±9 kHz)

Video

Composit input level .... 1 V/75 Ω
PAL/SECAM/NTSC Compatible
Composit output level .... 1 V/75 Ω
PAL/SECAM/NTSC Directly Through Input

Note:
- Specifications and the design are subject to possible modification without notice due to improvements.

● AVM-P9000/ES

General

Power source	14.4 V DC (10.8 – 15.1 V allowable)
Grounding system	Negative type
Max. current consumption	
Backup current	10 A
Accessory current	4 A
Dimensions	307 (W) × 51 (H) × 187 (D) mm
Weight	2.5 kg

Amplifier

Continuous power output is 22 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.

Maximum power output	45 W × 6
Load impedance	4 Ω (4 – 8 Ω allowable)
Preout maximum output level/output impedance	2.2 V/1 kΩ
Decoder	Linear PCM/Dolby Digital/Dolby Pro Logic/DTS
Equalizer (3-Band Parametric Equalizer)	
(Low)	Frequency: 40/80/100/160 Hz
(Mid)	Frequency: 200/500/1k/2k Hz
(High)	Frequency: 3.15k/8k/10k/12.5k Hz
Level	±12 dB
Subwoofer output	
Crossover frequency	63 Hz, 100 Hz, 200 Hz
Level	±10 dB
Speaker setting	
Time Alignment	0 – 500 cm (2.5 cm)
Level	±10 dB
Equalizer	Band: 3 Band Frequency: 100/125/160/200/250/315/400/500/630/800/1k/1.25k/1.6k/2k/2.5k/3.15k/4k/5k/6.3k/8k Hz Gain: ±12 dB Crossover frequency: 63, 100, 200 Hz

FM tuner

Frequency range	87.5 – 108 MHz
Usable sensitivity	10 dBf (0.9 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity	15 dBf (1.5 µV/75 Ω, mono)
Signal-to-noise ratio	70 dB (IEC-A network)
Distortion	0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response	30 – 15,000 Hz (±3 dB)
Stereo separation	40 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range	531 – 1,602 kHz (9 kHz) 530 – 1,710 kHz (10 kHz)
Usable sensitivity	18 µV (S/N: 20 dB)
Selectivity	50 dB (±9 kHz) 50 dB (±10 kHz)

Video

Composit input level	1 V/75 Ω PAL/SECAM/NTSC Compatible
Composit output level	1 V/75 Ω PAL/SECAM/NTSC Directly Through Input

Note:
- Specifications and the design are subject to possible modification without notice due to improvements.